उत्तिष्ठत
जाग्रत
प्राप्य
वरान्निबोधत

PRABUDDHA BHARATA

ARISE! AWAKE! AND STOP NOT TILL THE GOAL IS REACHED

Vol. 106 JANUARY 2001 No. 1

VEDIC PRAYERS

❖

चित्पतिर्मा पुनातु वाक्पतिर्मा पुनातु देवो मा सविता पुना-
त्वच्छिद्रेण पवित्रेण सूर्यस्य रश्मिभिः ।
तस्य ते पवित्रपते पवित्रपूतस्य यत्कामः पुने तच्छकेयम् ॥

Śukla Yajur Veda, 4.4

❖

May the ruler of the mind (*cit*), the Supreme Being,
make me pure.
May the ruler of speech (*vāk*), the Supreme Being,
make me pure.
May the glorious Sun make me pure
with his unbroken stream of the rays of knowledge.
O ruler of purity, I desire to attain your nature—
the nature purified by knowledge.
May I attain that immaculate purity born of true knowledge.
May I become pure.

The Soul of the Future

EDITORIAL

The Vedas mention a strange animal. None of us have seen such an animal. It is said that the animal has two heads, four horns, seven hands, and three feet. And in order to restrain such a bizarre animal, they tie it to three posts. The *Ṛg Veda* (4.58.3) has an important mantra to describe this animal, and the *Mahā Nārāyaṇa Upaniṣad* quotes it.* In his beautiful commentary to the Upaniṣad, Swami Vimalananda mentions that this animal means different things to different people. The greatest Vedic authority, Sāyaṇa, thinks that it should mean fire or the Sun. To another commentator, Bhaṭṭa Bhāskara, it could mean sacrifices with auxiliaries. To Patañjali this animal is the symbolic description of speech.

Such an outlandish animal isn't peculiar to the Vedas alone. An almost similar animal is described in the Bible too. Daniel (*Daniel*, 7) sees such an animal, a ram, and describes it.

Since nothing is definite about this mysterious animal, we could see how it suits the modern times. Let's try to find out what this mystery means to today's world.

We, the People

Look at us. We're all born, live on this great planet for some time, and depart. Different religions may have different explanations for our birth, life and death. But the one truth is that our lives are 'pre-destined' the moment we're born: that we shall all die one day.

Birth and death aren't everything. There is something more. The strange-animal symbology could be used to know this, and we shall be surprised to find that our soul is that strange animal! Our soul too has three feet, two heads, four horns, seven hands, and it is tied to three places. Unimaginable, but true.

It's common knowledge that the moment we are born we get related to a family, a society, and the world at large. We aren't islands. The interactions with these three is what our life on earth means. This interaction brings sorrow and happiness in its train. Our lives are so structured that, try as we may, we can't escape the inevitable suffering due to these three causes. Thus the soul has three feet to stand upon—family, society and the world.

Next, we are tied down to three pegs: our actions. What we did in the past is bearing fruit now and so we are what we are. There are many other past actions waiting to bear fruit. And what we do now will bear fruit in the future. These, then, are the three pegs.

Now, as we grow up, we have always two options before us: we can either be good or bad. Thus there are two heads to the soul: worldly pursuit (*abhyudaya*) and other-worldly pursuit (*niḥśreyasa*). Naturally enough, worldly pursuit means to think of making money (*artha*) and enjoying life (*kāma*). So these are the two horns on the head called worldly pursuit. Though worldly pursuit is all right, once we decide that we shall seek something higher, we take to other-worldly pursuit or the path of the good. This path means that we follow the dictates of ethics in order to attain the highest goal. Hence the other head of the soul has two horns, *dharma* and *mokṣa*. Whatever the term *mokṣa* may mean, all religions of the world agree that we should seek God or the Highest or Truth and attain Him or It. Only then shall we be free from misery and suffering that the world gives us.

Even as we have the choice of either taking to the path of good or bad, we have qualities in us which tend to make us perfect in

---

* चत्वारि शृङ्गा त्रयोऽस्य पादा
द्वे शीर्षे सप्तहस्तासो अस्य ।
त्रिधा बद्धो वृषभो रोरवीति
महो देवो मर्त्यां आविवेश ॥

either way. We have anger, pride, jealousy, etc, which can make us terrible beings. At the same time, we have good qualities which can make us gods! These good qualities are seven and so they could be compared to the seven hands in the animal symbology.

Of the seven hands of the soul, the *first* one is **truth**. No religion on earth forgets this fundamental moral precept. Truth is the source of all moral virtues. To be truthful in thought, word and deed is *the* way to attain lasting happiness. The *second* hand of the soul is **love**. Love for Truth or God, as well as other beings, leads us out of the prison-houses called ourselves. Love brings the other precepts like non-injury, temperance, prudence, etc, in its train. The more we pour out love on others, the more we expand. It is love that makes us serve others wholeheartedly. And it is service to others, say all religions, that will make us godly. The *third* hand of the soul is **knowledge.** The correct idea of things, and the paths and goals of life is supremely vital. Without proper knowledge, how could we ever think of progressing? The *fourth* hand of the soul is **purity**. Purity is the light of the soul. It is purity that lifts the soul from the darkness of the world. Is there any religion which doesn't eulogise purity? Like the lotus that springs out of the muddy waters, the soul grows out of the world in which it is born owing to its pristine purity. The *fifth* hand of the soul is **faith**. Our character is directly proportional to our faith. As is our faith, so is our gain. To have faith in our potentialities and in something higher than what we see around as true is imperative for the soul to expand and grow. Call the ideal God or Truth, it is faith in this ideal that is called true dharma. The *sixth* hand of the soul is **strength**. Strength, a strong will, is the keystone to success in any endeavour. Without strength, the soul finds it impossible to live up to its own ideals. It is strength that makes the soul swim against the strong tide of worldly attractions, to be moral, truthful, pure, and to serve others wholeheartedly. What to do and what not to do in this world is tremendously confusing. There are times when even the best of men fail in keeping to the ideal standards set by dharma. It is strength that leads the soul forward. The *seventh* hand of the soul is **renunciation**. By renunciation, the readiness to give up what the soul considers a hindrance to its onward march is meant. It's not always easy for us to give up our hold on certain things of the world which are dear to us: The famous example of the camel's eating thorns comes to mind here. Though painful, the soul should be ready to part ways with what it knows to be a bondage and a producer of suffering.

In order for the soul's journey in this world to be fruitful and without mishaps, it has to make full use of these seven limbs so that it may safely land on the other shore—the shore of Light. It is then that the three bonds that tie the soul down to the earth are cut asunder. Like the strange animal which roared aloud, the soul will exclaim aloud: 'shalom' 'peace'; and he has won!

Thus, the strange animal that we met with in the beginning could be the soul whose three feet are the family, society and world. Its two heads are *abhyudaya* and *niḥśreyasa*. The four horns are *artha, kāma, dharma* and *mokṣa*. The seven hands are truth, love, knowledge, purity, faith, strength and renunciation.

The Guiding Force

We saw that the soul has two ways before it: either to drown itself in the world or to go towards light. Now, who or what is it that guides the soul towards light? Here comes the role of religion. Religion takes up the position of the mother: like a gentle and loving mother, it takes the soul towards its destination.

We can apply the strange-animal symbology to religion also. Religion stands on *three feet*: God, soul and the universe: each one is indispensable to religion. Secondly, it has *two heads*: the prophet and the scripture. And it has *four horns*: On the prophet-head, it has two: monastic and laity, and on the scripture-head, it has the other two: institution and mysticism. Then there are *seven* very active *hands*: Hinduism, Christianity, Islam, Buddhism, Judaism,

Sikhism and Zoroastrianism. Finally, religion is bound to three pegs: philosophy, mythology and ritual. The heart of this religion-animal is human destiny. Thus the soul has religion as its guiding force. This guiding force shows the soul the path to supreme good. That is the ideal and purpose of religion.

Struggle for Superiority

Unfortunately, over the centuries the different 'hands' of religion have come to fight with one another. Strange as it may appear, each limb thought that it had a separate entity, that it was more superior than the others, that its goal and purpose were all different from those of the others, and that its only good was in condemning and destroying the other limbs. So the fight continued.

We called religion 'mother'. What can a child do when its mother becomes mad? It starves and suffers. Let alone the other causes of suffering that the soul is to endure in the world, it has one more major suffering when religions, instead of becoming mothers teaching good, become sources of further trouble. So for centuries the soul expected that good sense would prevail amongst the different religions. At last Ramakrishna came.

The World-Moving Force

There had been one or two very minor attempts before to bring the quarrelling religions together. But all failed because there was the need of some supremely strong power, which could say with authority that the quarrel should stop by giving convincing reasons.

Ramakrishna came. He struggled hard and saw what each quarrelling hand of religion had to say. He studied them all thoroughly. He practised their teachings. And then he declared that the different hands of Religion are integral parts of a single whole. Though the hands are different, they all are joined to one single body and have one single end.

The Universal Movement

Thus began a new movement, the movement which understands only oneness and harmony. This movement knows no differences; knows no hatred; knows no separatist policies. The doors of this movement are open to everyone and to everything.

We shall once again use the Vedic-animal symbology to study this unique movement of universal dimensions.

Sri Ramakrishna, Holy Mother Sarada Devi, and Swami Vivekananda are the *three feet* of this movement. The movement has *two heads*: the liberation of the soul (*ātma-mokṣa*) and the all-round well being of the world (*jagaddhita*). We saw earlier that the soul had either to follow the world and its ways, or go along the higher path. Now such differences have been eliminated. Everything has been made sacred. To work for the welfare of the world means to seek Light. This has automatically led to the growth of *four horns* on the two heads: Karmayoga, Jnanayoga, Rajayoga and Bhaktiyoga.

Then the movement has seven hands to achieve the two ends of the soul. These hands are service in the following fields: education, medicine, natural calamities, finance, culture, religion and spirituality. And this movement is bound to *three pegs*: Dualism (*dvaita*), Qualified Non-dualism (*viśiṣṭādvaita*) and Non-dualism (*advaita*). Thus we see that nothing has been left out in this global movement.

This, then, is the new universal movement for the new millennium. It is a movement of everyone, by everyone and for everyone. All are one and all are struggling to attain liberation from the bonds of suffering, whatever the way of life. Anyone who is interested in oneness, in goodness, in the glory of attaining the highest good, is part of this movement. It is a movement, meant to help everyone, everywhere, in every state of life.

This, then, is the movement of the future, the movement of oneness. ❑

Vedanta: Future, Scope, Prospects

SWAMI RANGANATHANANDA

Vedanta has a glorious future, for the simple reason that it is the Truth and deals with the eternal Truth—this assurance is given by a venerable nonagenarian monk of international repute, who has been teaching Vedanta worldwide since the last several decades. Srimat Swami Ranganathanandaji Maharaj is President, Ramakrishna Math and Mission. Of his famous works, the four-volume Eternal Values for a Changing Society *is important; this article has been prepared using it. We thank Swami Satyamayanandaji for helping us in presenting this article to you.*

Vedanta, its Increasing Relevance

Indian culture in its long career has experimented with life in its diverse aspects and levels. It has not neglected any of the values of *life*, but has concentrated more on some than others. The Indo-Aryans were not content to live at the level of their bodies. With stability achieved at the material and social level, their mental life began to experience deep stirrings and questions, which slowly led them to question their erstwhile philosophy of facile optimism, and to forge ahead to wider horizons of thought and deeper levels of experience. Towards the end of the Vedic period, Indian history entered its most creative period through the Upanishads, which, so far as the whole subsequent history of India is concerned, is also the most decisive and pervasive. In the Upanishads we can study the graceful conflict of thought with thought, and the rejection of the less adequate ideas without a tear. Hypotheses are advanced and rejected on the touchstone of experience and not at the dictate of a creed. Thus thought forges ahead to unravel the mystery of the world in which we live.

One of the important components of that deepening mystery of the universe is the mystery of man himself; the Upanishads gave to all humanity the greatest of all sciences—the science of the Self. Thus emerged the beautiful edifice of thought known as Vedanta, impersonal in approach and therefore universal in spirit. In spite of its hoary antiquity, Vedanta has been young and dynamic in every past epoch of history. But its most fascinating story is just opening up in the context of the modern world conditions created by science and technology, in which thinking humanity of the whole world has become its audience.

The Comprehensive Reality

Vedanta is both philosophy and religion. The absolute of Vedanta is not merely a logical postulate; it is a given fact of experience, an actuality, the basis of all presuppositions of logical thought and common experience, but ever beyond the grasp of both. 'It is that which speech and thought fail to express, but through which speech and thought themselves express words and ideas' (*Kena Upanishad*). It is the Seer of thought and the Witness of the universe, of religion. It is the reality in man, the Atman—his real Self behind his ego or apparent self. As Isvara, it is the personal God of religion, the highest reading of the Absolute by the human mind, the sum total of all souls, human and non-human, whose limited expression is in time and space in this world. The Vedanta speaks of one and the same reality as Brahman in its metaphysics, as Atman in its epistemology and mysticism, and as Isvara or Bhagavan in its religion. Brahman as Atman, as the Reality behind the ego, gives us a God who, unlike the extracosmic God of monotheism, is not outside of us nor we of Him. He is the Soul of our soul, our very Self.

He is the *pratyagatman*, the Inner Self, He is the *antaryamin*, the Indwelling One, the Inner Ruler. The finitude of man is underwritten by the infinitude of God. Man is divine, and his redemption is, therefore, implicit in his very being. But this divine nature remains covered, lying forgotten. In nature as well as man, there is this mantle of darkness that covers Reality; this *avidya* or Maya has made us forget our real nature. This veil of ignorance is thick or thin as the man is pure or impure. Its complete destruction is illumination or perfection.

The Infinite is the Motive of Man's Struggle

Every advance in purity is a step in the tearing of the veil, while every impure thought or act thickens the veil and deepens the darkness. Herein lies the meaning of all morality. This truth of the ever-present purity and perfection and freedom of his being on the one hand, and his apparent alienation from it due to the veil of Maya or spiritual blindness on the other, has been the one motive force in history, according to Vedanta, behind man's spiritual adventures, his hunger and thirst after righteousness, his struggles for the realization of political liberty and social justice, in short, behind all his endeavours to achieve civilization and culture. The brooding of the spirit over the waters of Life produces social and political upheavals as much as scientific discoveries, moral achievements and spiritual realizations. This is the meaning of history in its comprehensive sense, the stirrings of the universal in the particular, the vibrations of the infinite in the finite, the struggle of eternity in the meshes of time. All knowledge, therefore, is within the province of Vedanta, be it secular or sacred, material or spiritual. Vedanta actively promotes natural sciences as much as religion, itself being a consummation and synthesis of both.

Religion the Solution for all Crises

There is too much meanness in our human character today. Every department of human life, be it politics, administration, business, education, or social life, is afflicted with this pathology of arrested human development. Today, the world as a whole is passing through a supreme crisis in all its history. The old world with its thoughts, opinions, and institutions is in a state of rapid dissolution; none can see yet clearly the shape of things to come. Deeply imbedded in the modern consciousness is a desire for the creation of a stable civilization. Thinkers in the East and the West give expression to this urge when they speak of the future world order. If the future is to witness the emergence of a world civilization, the collective wisdom of mankind has to be utilized for its realization. When we live the life of religion, strength comes to us, consciousness becomes expanded, sympathies grow and widen, and we feel that we are growing into better men and women. It is only the strength that proceeds from such inward spiritual growth that will enable man to digest and assimilate and discipline the energies released by the progress of scientific technology. Such a person alone has the strength and wisdom to convert the chaos of life into a pattern of peace and happiness and general welfare. If religion is taken away from human society, what remains is simply barbarism. Ancient civilizations were destroyed by barbarians bred outside those civilizations. But modern civilization, if it is to go the same way, will be destroyed by barbarians bred within civilization itself.

Expansion of Consciousness

Man lives in a social context with conscious interactions with other human beings, where his consciousness is involved with the consciousness of other human beings. It is in this context of human interaction in society that the human consciousness receives its first great training to raise it to a higher level, in order to achieve happy and fruitful human relationships. This raising of consciousness to higher and higher levels constitutes, says Vedanta, the spiritual growth, development, and fulfilment of man. In all such spiritual growth, we can see a profound change within the individual concerned. Initially, he is only concerned with his own organic system, to which

he is tied from birth; but in spiritual growth or in psycho-social evolution, man detaches the human psyche from the limited organic system and expands in love and concern, compassion and dedication, sympathy and understanding. This development of individual into personality, and the raising of the level of consciousness, has many stages. Modern conditions demand that our consciousness breaks down all barriers to neighbourliness and develop a mankind-awareness and a mankind-sympathy, extending the same relevantly to the animal and plant world as well. Vedanta also tells us that this is not enough, there are higher human possibilities, there is a depth dimension of man to be unfolded. These higher spiritual experiences give man enlightenment and not mere knowledge.

Our Deep Divine Dimension

The little formula, *tat tvam asi*—That thou art—conveys the profoundest truth about man, lying at the deepest level of his being. It tells man: 'You are not this tiny organic system; there is a profound divine dimension within you beyond your physical, neurological, and psychic dimensions.' That truth has to be realized by man, the truth of *tat tvam asi*. Today, in this modern age, this tremendous philosophy is becoming available to the vast masses of human beings everywhere in the world. And when people come to know it, they experience the inherent glory, the dignity, the worth, and the strength of man in a way never experienced before. Where do we stop in this great march? We can stop at any point of this momentous journey to truth and fulfilment, but only to take a breath and continue the march again. This truth is our birthright, we have not to borrow it or beg for it; we have only just to realize it in our life. This is human evolution, says the Vedanta. The human individual is physically limited but spiritually unlimited. This limited measure of height and weight and size, nature chose for her unique product, man, after so many experiments, from tiny insects to gigantic dinosaurs. But within this tiny human system, nature has hidden many mysteries, many treasures. Treasure is the word. Whether it is East or West, human problems are practically the same everywhere; conditions may be different, but the problems are the same. The message of Vedanta is also the same, namely, continual manifestation of the divine within. The *Yajur Veda* exhorts man to, 'March on and march on!'—*caraiveti, caraiveti!* That is the refreshing attitude of Vedanta; that is its strength; that is also its intense human concern.

Glorious Future of Mankind

Modern civilization has overrated physical science and technology, just as older civilizations had underrated it. Physical science started with the exploration of the mysteries of external nature; but at the farthest end of this search, it finds itself face to face with the mystery of man, of his mind and consciousness, the deepest mystery of all. The philosophies of the East, particularly the Vedanta including the Buddhist thought, directly faced the mystery of man by initiating the exploration of the internal world and carrying it through its depths. And, today we witness a steady convergence of these two indirect and direct approaches in the emergence of a common philosophy of the One behind the many. The combination today of the spiritual energies of these two complementary disciplines in the life of man will produce fully integrated human beings, and thus evolve to help a complete human civilization, for which the world is ripe and waiting. ❑

Vedanta is necessary because neither reasoning nor books can show us God. He is only to be realised by superconscious perception, and Vedanta teaches how to attain that.

—*Swami Vivekananda*

The Hope for the Future

THE DALAI LAMA

We express our heartfelt gratitude to the world-renowned spiritual leader, His Holiness the Dalai Lama, for kindly permitting us to publish his thoughts here.

One great question underlies our experience, whether we think about it consciously or not: What is the purpose of life? I believe that the purpose of life is to be happy. From the moment of birth, every human being wants happiness and does not want suffering. Neither social conditioning nor education nor ideology affects this. From the very core of our being, we simply desire contentment. I don't know whether the universe, with its countless galaxies, stars and planets, has a deeper meaning or not, but at the very least, it is clear that we humans who live on this earth face the task of making a happy life for ourselves. Therefore it is important to discover what will bring about the greatest degree of happiness.

For a start, it is possible to divide every kind of happiness and suffering into two main categories: mental and physical. Of the two, it is the mind that exerts the greatest influence on most of us. Unless we are either gravely ill or deprived of basic necessities, our physical condition plays a secondary role in life. If the body is content, we virtually ignore it. The mind, however, registers every event, no matter how small. Hence we should devote our most serious efforts to bringing about mental peace.

From my own limited experience I have found that the greatest degree of inner tranquillity comes from the development of love and compassion.

The more we care for the happiness of others, the greater our own sense of well-being becomes. Cultivating a close, warmhearted feeling for others automatically puts the mind at ease. This helps remove whatever fears or insecurities we may have and gives us the strength to cope with any obstacles we encounter. It is the ultimate source of success in life.

As long as we live in this world we are bound to encounter problems. If, at such times, we lose hope and become discouraged, we diminish our ability to face difficulties. If, on the other hand, we remember that it is not just ourselves but everyone who has to undergo suffering, this more realistic perspective will increase our determination and capacity to overcome troubles. Indeed, with this attitude, each new obstacle can be seen as yet another valuable opportunity to improve our mind!

Thus we can strive gradually to become more compassionate, that is, we can develop both genuine sympathy for others' suffering and the will to help remove their pain. As a result, our own serenity and inner strength will increase.

Ultimately, the reason why love and compassion bring greatest happiness is simply that our nature cherishes them above all else. The need for love lies at the very foundation of human existence. It results from the profound interdependence we all share with one another. However capable and skilful an individual may be, left alone, he or she will not survive.

In conclusion, individual happiness can contribute in a profound and effective way to the overall improvement of our entire human community. I believe that at every level of society—familial, tribal, national and international—the key to a happier and more successful world is the growth of compassion. We do not need to become religious, nor do we need to believe in an ideology. All that is necessary is for each of us to develop our good human qualities. ❑

A Global Mission and the Future

AN INTERVIEW WITH
SWAMI SMARANANANDA

Srimat Swami Smarananandaji Maharaj is General Secretary, Ramakrishna Math and Ramakrishna Mission. Vastly learned, Revered Maharaj has toured very extensively, both in India and abroad, spreading the message of hope and peace. He has numerous articles to his credit. In spite of his busy schedule, Swami Smarananandaji made some time to answer a few questions, put to him by **Swami Satyamayanandaji**. *The Swamiji's answers show his deep understanding of the situation and of the message of Ramakrishna-Vivekananda.*

As a premier monastic institution, what role has the Ramakrishna Math and Ramakrishna Mission to play in the future?

The Ramakrishna Order—comprising the Math and the Mission—represents a new chapter in the history of monasticism in India. What is special about it is that it bridges the gulf between the ancient and the modern. The eternal values, which are the bases of India's spiritual and cultural heritage, form the foundation of the Order; it is trying to adapt these values to suit the needs of the modern age and make them meaningful and practical in our day-to-day life. There's a popular Sanskrit saying, '*Calat ekena pādena, tiṣṭhat ekena buddhimān*, the intelligent person stands firmly on one foot and goes forward with the other.' The Ramakrishna Order's approach is similar. In this process there may be successes and failures, but we have to gain experience through these successes and failures and go forward in bringing the living message of Ramakrishna-Vivekananda to people throughout the world. This will have to be done not only through the spoken word and publications, but also through practical, dedicated work in various fields. This would prove to the world that the Vedanta as preached by Ramakrishna-Vivekananda is a living faith and not something negative, remotely connected with the day-to-day life of the people. This is the role of the Ramakrishna Math and Mission—to bring the eternal values of ancient times, as preached and practised by Ramakrishna and his disciples to the people at large in the aforesaid manner, thus connecting the ancient with the modern way of life.

In this fast-paced society, where the world has now become a 'global village', do you think people are still seeking lasting values?

The concept of 'global family'—let alone 'global village'—is as old as history itself. The Vedas declare, '*Yatra viśvaṁ bhavati eka nīḍam*, where the whole universe becomes one family.' Though humankind has been dreaming of bringing about such an ideal state of affairs in the world, it has not been achieved so far, for the fundamental ways of man remain the same today as they were thousands of years ago. The world has become a 'global village' only at the physical level, leading to a 'fast-paced society.' But on the mental level, man is motivated by the same emotions—love, hate, etc, as it was in olden times.

Of course there have been people seeking lasting values, though in a minority, all through the ages. But the problem has been how to make them real in human life. In recent years there has been a hue and cry about protecting the environment. That is laudable indeed, but the environment of the human mind has not been taken care of. This is what all the thinking persons in the modern world should turn their attention to in the new millennium.

How can Vedanta be spread everywhere in this age of information and biotechnology?

Well, all the progress in information technology and biotechnology can be taken advantage of for spreading the universal message of Vedanta. Machines are amoral: it is how we make use of them that makes the difference. Science and technology could be harnessed to build up a better, peaceful society, or it could also be used for violence, destruction and immoral activities.

Therefore science and technology could be of help in the spreading of Vedanta, which is a way of life with the highest truth as its goal. Vedanta need not be a far-away, remote ideal, to be reached only after death. The Upanishads and the *Gita*, the bases of Vedanta, emphasize that this ideal is to be realized here and now—*ihaiva*. The *Gita* assures that spiritual effort is never wasted if the goal is not reached in this very life. In its next birth the soul picks up from where it left. So technology can definitely help in creating the right mind-set for the modern man so as to make life meaningful and goal-oriented.

We hear that the initial enthusiasm for Vedanta that the West showed is cooling down. Is it true? Do we need to re-interpret Vedanta to suit future generations?

I don't believe that the initial enthusiasm for Vedanta that the West showed is cooling down. There is a flooding of the West by various eastern religions and creeds, like yoga, tantras, ISKCON, Zen, and so on. As a result, the westerners who are looking for new ideologies land in one of the many eastern creeds that are claiming attention. Vedanta, which originally held an exclusive sway over the West, has become one of the many creeds now. Nevertheless, to be more popular, Vedanta has to become practical. Mere philosophizing will not do. The westerners ask for 'result-oriented' practical methods. So in order to re-interpret Vedanta for future generations, what is needed is to adopt practical methods of teaching Vedanta.

What are the teachings of Ramakrishna-Vivekananda which are specially suited to the modern world?

The highlights of the teachings of Ramakrishna and Vivekananda, which can attract modern people, are the following:

a. The truth of God can be experienced. It only needs an 'inward research' instead of the 'outward research' of physical science. The methodology is different: here one's research happens within oneself.

b. The truths of spiritual life are universal. All religions are like so many paths leading to the same goal. The essence of religion should be freed from the shackles of social and local cultures.

c. 'Service to man is service to God.' The old Vedanta which led one away from humanity is brought very close to it by this teaching. Of course, this idea reflects the Upanishadic teaching that everything in the world is dear to us because we are seeking our own Atman in everybody and everything (*Brihadaranyaka Upanishad*, 2.45).

d. The idea of renunciation. Though apparently modern man is averse to this idea, a time comes in everyone's life when consumerism has to be replaced by restraint. Therefore the teaching of the renunciation of lust and lucre, which Sri Ramakrishna emphasized, is also the need of the hour.

Do you think the teachings of Ramakrishna-Vivekananda will bring about a sea change in the outlook of the world in the future?

No teaching of anyone can bring about a sea change in the outlook of the world. The problems of modern man are not so modern after all! Humankind might have conquered external nature to some extent, but the internal nature remains the same. The feelings—love, hate, fear, jealousy, sympathy, etc—which motivated ancient man are common to modern man also. However, the teachings of Ramakrishna-Vivekananda can definitely subdue the violence, greed, and passion that characterize today's world. True spiritual life

is possible on a firm moral foundation. Like 'get-rich-quick' schemes that attract people, there is a quest for 'instant spirituality'—even God-realization—in today's world. What the teachings of Ramakrishna-Vivekananda can do is allay the thirst for true spirituality.

What is your advice to the youth?

The youth should not blindly follow anybody. They should be taught to think and reason independently and then decide what they would like to do with their lives. Earning money cannot be the only persuasion in life. In the modern world there are so many avenues for creative expression. Our youth should decide after mature thinking what they want to do with their lives. Knowledge for earning one's livelihood is all right. But that cannot be the be-all and end-all of life. I believe that if youths do not take life too lightly, but do so seriously and decide how to shape their lives, then the world would be a better place to live in. ❑

The Ethics of the Future

The more ignorant, the more unenlightened the soul, the more it thinks that it is separate from the rest of the universe. The more ignorant the person, the more he thinks he will die or will be reborn, and so forth—ideas that are an expression of this separateness. But we find that, as knowledge comes, man grows, morality is evolved, and the idea of non-separateness begins. Whether men understand it or not, they are impelled by that power behind to become unselfish. That is the foundation of all morality. It is the quintessence of all ethics, preached in any language, or in any religion, or by any prophet in the world. "Be thou unselfish", "Not 'I', but 'thou'"—that is the background of all ethical codes. And what is meant by this is the recognition of non-individuality—that you are a part of me, and I of you; the recognition that in hurting you I hurt myself, and in helping you I help myself; the recognition that there cannot possibly be death for me when you live. When one worm lives in this universe, how can I die? For my life is in the life of that worm. At the same time it will teach us that we cannot leave one of our fellow-beings without helping him, that in his good consists my good. This is the theme that runs through the whole of Vedanta, and which runs through every other religion.

There are attempts at producing a system of ethics from the mere grounds of utility. I challenge any man to produce such a rational system of ethics. Do good to others. Why? Because it is the highest utility. Suppose a man says, "I do not care for utility; I want to cut the throats of others and make myself rich." What will you answer? It is out-Heroding Herod! But where is the utility of my doing good to the world? Am I a fool to work my life out that others may be happy? Why shall I myself not be happy, if there is no other sentiency beyond society, no other power in the universe beyond the five senses? What prevents me from cutting the throats of my brothers so long as I can make myself safe from the police, and make myself happy? What will you answer? You are bound to show some utility. When you are pushed from your ground you answer, "My friend, it is good to be good." What is the power in the human mind which says, "It is good to do good", which unfolds before us in glorious view the grandeur of the soul, the beauty of goodness, the all-attractive power of goodness, the infinite power of goodness? That is what we call God. Is it not?

—Swami Vivekananda

Some 21st Century Global Trends and India

A. N. D. HAKSAR

There are causes for concern, but international relations can always be harmonious, provided nations evolve means of mutual understanding and cooperation rather than reasons for conflict. Apart from being a well-known translator of Sanskrit classics, Sri A.N.D. Haksar has dedicated his life for international causes: as the ambassador of India to several countries, and as President of United Nations Environment Programme. In this brief but remarkable write-up, Sri Haksar discusses India's relations with the world in the future with foresight.

Predictions are hazardous in an area of such constant fluidity as international relations. This is particularly the case with potential conflict situations, which are excluded from this review. Yet some important global trends are clear as we move into the 21st century.

The world is increasingly becoming smaller and more interdependent. Globalization is growing. Multiple power centres are emerging. Awareness of human rights is expanding. People are more demanding of governments which are seen as monopolizing power. States are more protective of their sovereignty, which is seen as under challenge, specially by the need for collective action to tackle trans-national problems ranging from environmental degradation to drug trafficking and terrorism.

Underlying these trends is the rapid progress in science and technology, which commenced in the previous century and has continued to accelerate. It is hard to remember that computers and cable TV, antibiotics and angioplasty, and many other marvels which we take for granted today, were no more than the stuff of dreams a hundred years ago. The growth of scientific knowledge, which has made them both possible and practicable, has also generated a momentum of its own for increased investment of economic and human resources into further research and the marketing of products developed as a result.

These trends are also affecting international relations. Telecommunications and information technology, together with improvements in air and surface transport, have brought the countries of the world closer than ever before in terms of contact and flow of information. From these follow cross-currents of influence and dependence, larger than they ever were in the past.

Globalization, in the original sense of the word, refers to greater freedom on international movement for trade, industry and capital, as also for their managers. Increasingly, the term is used to denote the growth of multinational corporations, seeking larger markets and economies of scale through the expansion of their operations across the world. In either case such movements and growth are often seen to have their corollaries in the increased influence of the more powerful entity, and more dependence for the weaker one. Such perceptions impinge on international relations when the entities concerned are states, and it is observed that rich countries are getting richer and more powerful as a result of globalization, while the poor ones remain stagnant.

A parallel trend is the move towards a multipolar world. The last half-century witnessed a bipolar system dominated by two competing military superpowers. With the dismantling of the Soviet Union a decade ago, the United States emerged as the sole superpower presiding over a unipolar system. This situation appears economically untenable in the long run, and other power centres are

already beginning to grow in Asia and Europe. Some observers see India as a potential part of this configuration.

Another global trend is the increasing awareness of human rights. Sparked by the information explosion and perceived economic disparities, it has also led to the emergence of popular movements for human rights, sometimes revolutionary or militant in nature. At one level is the demand for more democratic governance, and more equitable sharing of resources; at another it is for the rights of particular ethnic or religious groups, without regard for those of any minorities living among them. In the latter case, international relations get affected when the demands of groups in one country are championed by another country which identifies with them for whatever reason.

The incidence of external influence, dependence or instigation of human rights demands is seen in some countries as impinging on their sovereignty, and the governments concerned feel obliged to take strong measures to defend this core attribute of a state's existence. Not infrequently this leads to situations affecting international peace and security. The proper role of the international community, when a country suppresses human rights in its own territory to protect its sovereignty, is a question to which the United Nations has still to find an agreed answer.

The trends in international relations identified here are as relevant for India as for any other member state of the world community. Fortunately for the country, the makers of its foreign policy have usually taken them into account in their decision making. Policy decisions on international affairs have traditionally been supported by a broad national consensus in India. At present this seems to be in danger of some erosion.

There was a school of thought that, by virtue of its size and resources, it may be possible for India to stand aside from some global trends and peacefully pursue its own path for national self-reliance. This may lead to isolationism and stagnation, according to another school, which advocates further steps to bring India into the economic mainstream of globalization, and thereby boost its rate of growth to a level commensurate with its increase in population. Eventually the country may be able to evolve a middle path which avoids the pitfalls of globalization but avails of its substantial economic benefits.

With its democratic polity and plural society, India may also be able to provide a lead in reconciling the sometimes divergent demands of human rights and state sovereignty, self-determination and national unity. Creative contributions to the restructuring of international relations has been a feature of Indian foreign policy since its independence. This is evident from its leading role in decolonization, nonalignment and international cooperation for development during the 20th century. Given India's size and potential, its continued close involvement with 21st-century world affairs appears to be an inevitability. But if it will enable India to assume its due place in the emerging multipolar world system remains to be seen.

For its international role to be meaningful globally and beneficial to itself, India needs to address problems nearer home. The establishment of durable and harmonious relations with all its neighbours is essential for achieving a stable security environment conducive to its full growth. At home, the problems posed by population and poverty, social reform and economic upliftment, have still to be tackled decisively. Another daunting problem is the preservation and strengthening of national unity at a time when divisive tendencies of various kinds are on the increase. On how well India deals with these challenges will largely depend the effectiveness of its international role in the 21st century. ❑

Astronomy: Projections for the Future

DR JAYANT V. NARLIKAR

Dr Jayant Narlikar is a household name today and his contributions to the field of astronomy are widely accepted. His astounding ability to explain terse scientific truths in an absolutely simple manner to the lay reader has made astronomy a popular subject in recent times. His recent popular book is The Seven Wonders of the Cosmos. *Dr Narlikar is Director, Inter-University Centre for Astronomy and Astrophysics, Pune. Along with this absorbing article, we publish a pictorial tribute to some of the great celebrities of astronomy.*

Introduction

The 20th century has drawn to a close at the end of 31 December 2000, and although nothing special is supposed to happen in real terms at this juncture, the moment acquires a significance in our mind largely because of the decimal system that we are used to! If we adopt the scale of 10 with the ten digits 0,1,2,3,4,5,6,7,8,9 to write any number, then the Hindu way of writing numbers attaches place values of 1,10, 100, etc as we write digits from right to left. Which is why we celebrate birthdays when our age increases by 1, and talk of decades, centuries and millennia as landmarks in the development of human societies.

Aristotle

My brief here at the turn of the millennium, is to briefly project the future and ask what important developments are going to take place in astronomy in the years to come. Certainly, taking advantage of space technology, electronics and computer revolution, and overall progress in our understanding of physics, astronomers have made rapid progress in the last three decades. This has raised everybody's expectations as to what more can be achieved in the future. Can we make futuristic projections in astronomy? This is not only a tall order, but my response to it will seem like a reckless exercise! Let us look at history and see what astronomers were thinking of at the turn of the *last* century.

Anaximander

Thales

Some Ancient Indian Astronomers

Agastya
Viswamitra
Aryabhata
Varahamihira
Brahmagupta

Towards the end of the 19th century, astronomers were convinced that our solar system sits at the centre of the Milky Way galaxy. The map prepared by William Herschel a century ago indicating this was still accepted with some modifications. Most astronomers were convinced of this fact. Yet within two decades of the 20th century, it became clear that *we are not at the galactic centre, but located some 30,000 light years away from it.*

Another shock in store for the astronomical community was about the extent and contents of the Milky Way. There were several cloud-like objects called nebulae, which were found in different directions of the sky.

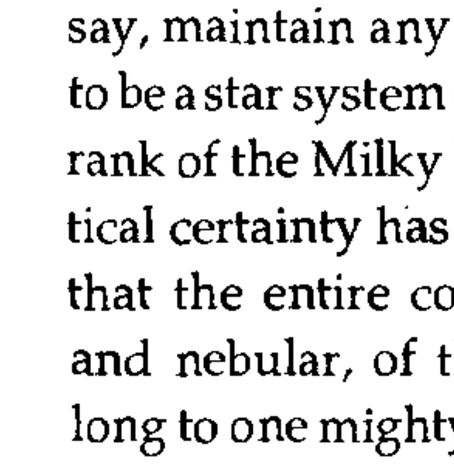
Nicolaus Copernicus

Giordano Bruno

How far were they? Some were definitely believed to belong to our Milky Way; but about some others there were doubts. For example, the Orion nebula is part of our galaxy, being a huge gas cloud containing old and young stars. But what about the Andromeda nebula? While most astronomers felt that this too was part of our galaxy, a small minority suggested that this may be *another galaxy similar to ours, only located far beyond it*. In the early part of the 20th century, this was considered an outlandish idea. See for example, an extract from a popular book *The System of the Stars* by Agnes Clerke written in 1905:

> The question whether nebulae are external galaxies hardly any longer needs discussion. It has been answered by the progress of research. No competent thinker, with the whole of the available evidence before him, can now, it is safe to say, maintain any single nebula to be a star system of co-ordinate rank of the Milky Way. A practical certainty has been attained that the entire contents, stellar and nebular, of the sphere belong to one mighty aggregation, and stand in ordered mutual relations within the limits of one all-embracing scheme.

Yet within a couple of decades of this statement, Edwin Hubble working at the Mount Wilson Observatory was announcing the existence of other galaxies similar to ours, and that the Andromeda nebula came to be recognized as another great galaxy in our neighbourhood, a galaxy similar to ours.



Johannes Kepler

I am quoting these instances to caution against complacency, against the feeling that today our observations are so precise that we know all the essential details of the universe. For, we may very well be wrong!

Galileo Galilei

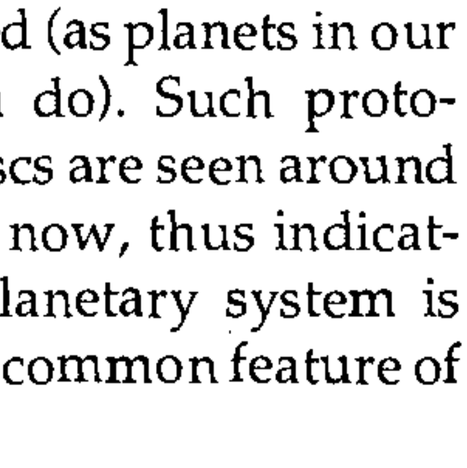
With these opening remarks I now make a few prognostications about which way astronomy will go in the coming decades of the new millennium.

The Discovery of New Planetary Systems

Is the Sun the only star with its own planetary system? Till 1983 there was no positive indication of other stars having planetary systems. In 1983, the Infra-Red Astronomy Satellite (IRAS) demonstrated the existence of proto-planetary discs. It is believed that when a star forms from a primordial gas cloud, it develops a disc around it which spins in the same general direction as the star. The planets condense out of this disc. A typical disc is likely to be dim in visible light but would radiate in the infrared (as planets in our solar system do). Such proto-planetary discs are seen around several stars now, thus indicating that a planetary system is likely to be a common feature of a star.

Omar Khayyam, the first Islamic astronomer

However, since 1991, planets are being found around stars by another means. The existence of a fairly massive (Jupiter-like) planet moving in an orbit close to a star would make the star wobble because of its gravitational influence on the star. Such wobbles can be detected in the spectrum of the star. From such studies, the first extra-solar planetary system was discovered around the pulsar PSR 1257+12. Three planets go round this pulsar. Amongst ordinary stars, 51 Pegasi was the first to be found with a planet.



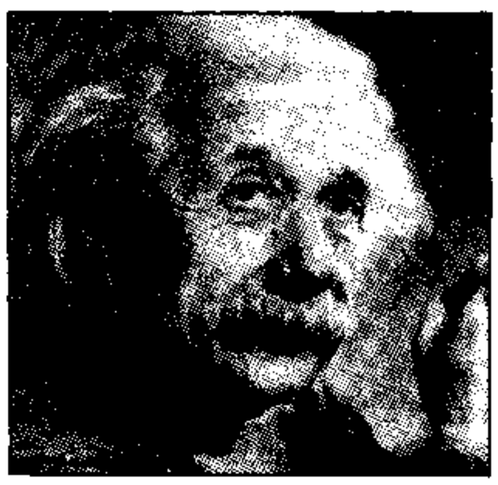
Isaac Newton

Robert Goddard

So my guess is that several examples of extrasolar planets will be found in the next few decades and probably we may find some planet-star pair similar to the Earth-Sun system.

The Mystery of Solar Neutrinos

One of the outstanding mysteries of the 20th century has been linked with our Sun. Since it is well accepted now that the Sun generates its radiation through nuclear fusion in its core, the fusion reaction is expected to release some neutrinos as well. The neutrinos are particles with very weak interaction with the rest of the matter in the Sun, they are ideally of zero rest-mass, which means that they travel with the speed of light, and they therefore carry 'recent' information about the centre of the Sun. Theoreticians can estimate how many neutrinos we should expect in a given period, in a terrestrial detector set up deep underground (to avoid any confusion with other particles which come through cosmic rays). Although three detectors have been looking for these elusive particles from the Sun, the records to date reveal that not more than a third to a half of the expected number are being detected.



Albert Einstein

This has led to several speculations. Are our calculations of the physical conditions in the central region of the Sun in error? Are the data on nuclear reactions, on which the calculations are based, in error? Are we missing some subtlety of the chemistry of the detector that makes it less efficient than supposed? Or, are we unaware of some intrinsic property of the neutrino that makes it difficult to detect in its original form?

Percival Lowell

I expect that this puzzle will be resolved in the years to come.

Gaps in the Biography of a Star

The science of stellar evolution is a success story of the 20th century. Right from the time of its birth in a dark interstellar cloud to its death in a violent explosion or in a slow fade out, different physical effects play a role. These effects have been studied and most of them understood satisfactorily. Yet there are a few important gaps. For example, one would like to know when and how, in a proto-star stage, it will lead to the formation of its proto-planetary disc. How does the star change its external physical characteristics as it reaches the end of the giant stage? The star may be relatively undisturbed as it puffs out shells of its outer envelope in gaseous form, while it progresses along a track when its temperature rises and mass reduces. Ultimately the star will 'rest' as a white dwarf when its radiation would be very little. Will we see such very old white dwarfs that may have been around for, say, 20 billion years or more?

Christiaan Huygens

Some massive stars may have more violent ends: known as supernovae, these stars explode with a short-term (a few days) ejection of huge quantity of radiation and matter. Although we understand the causes that trigger off these explosions, the details await the usage of high-capacity and high-speed computers. I expect that in the coming years, this problem will finally be laid to rest.

Stars produce heavier and heavier nuclei as they shine with the energy produced by the thermonuclear reactions. Our Milky Way galaxy will show an evolution of its chemical composition as it ages, thus giving infor-

Erwin Schrödinger

S. Chandrashekhar

mation on its overall age, and giving clues to its origin. Again, a coherent picture will eventually form, but till then we have to base our picture on some conjectures. This is an important area in which the coming century is bound to shed new light.

Understanding of Structures of Galaxies

Our galaxy is disc-shaped and has spiral arms. Why? Many galaxies have this spiral structure and they, like ours, also show a central bulge on top of the disc. Why? A large fraction of galaxies are elliptical, not showing the disc + bulge + spiral shape at all. Why? If the generic shapes are spirals and ellipticals, then why are some galaxies with irregular shapes? Then there are a large number of small 'dwarf' galaxies too. What is their role in the scheme of things?

A related issue is of radio galaxies and quasars which are powerful sources of radiation. The former, as their name implies, emit radio waves while the latter radiate in many different wavelengths including radio, optical, infrared, ultraviolet and X-rays. And that too from a comparatively very compact region. What is the energy mechanism that leads to these extraordinary manifestations?

There are several such questions. Indeed, it will not be unfair to draw a parallel with the situation prevailing at the beginning of the 20th century, when a lot of observations of stars were available but did not fit into a comprehensive scheme of stellar evolution. It was only when the energy source in stars was identified with nuclear fusion that such a scheme emerged. Are we missing such a comprehensive scheme for galaxies? Only time will tell...hopefully the coming decades will bring a resolution of this puzzle.

Carl Sagan

The Evolution of Large-Scale Structure

The galaxies are just one manifestation of structure in the universe. History of astronomy to date tells us that as the observing techniques improved and man could view the cosmos on larger and larger scales, he began to discover structures on larger scales too. Thus, from galaxies there emerged *groups* of galaxies, then *clusters* of galaxies followed by *superclusters* of galaxies (separated by giant voids)...much like the division of populations into cities, districts, states and nations. Have we reached the end of hierarchy? Many astronomers think so. But then thirty years ago most astronomers refused to believe that superclusters existed!

Satyendranath Bose

So the searches will continue with bigger and better instruments and we may get a better perspective of the *present* structural hierarchy. But then we need to understand how that hierarchy came about. The answer will have to fit into the theory of evolution of the universe as a whole. Or the other way round: the theory of the universe must be consistent with the structural hierarchy that we see at present.

At present there are many investigations into this past-to-present development of large-scale structure. There are additional lines of evidence that need to be taken into account. Like matter, there is also the all-pervading radiation. How homogeneously is it distributed? What can its observed inhomogeneities tell us about the large-scale structure of the universe? Can we spot young and old galaxies and use them as milestones in this structural evolution? Can the change of chemical composition reveal how structures evolved? These are the issues that will dominate astronomy and cosmology in the years to come.

George Gamov

Fred Hoyle

Theories of the Universe

This short list will not be complete without the mention of the fundamental question in cosmology: *What do we know about the origin and evolution of the universe?* Despite the popularity that the big bang cosmology currently enjoys I feel that our perception of the universe will undergo a radical revision during the coming century. I think more and more evidence will come to light telling us that the universe is much older than we think it is, that it is far more inhomogeneous than we think it is, and that our perception of the laws that govern its behaviour is more incomplete than we imagine. This is my gut feeling, not based on any current evidence, but by looking at the way our perception of the universe has expanded with time. Right from the days of the geocentric theory when man thought his Earth to be at the centre of the universe, the human tendency has been to simplify the universe so that it can be grasped with his current abilities and knowledge. The universe has never obliged in this way! Rather, at each stage of development of science and astronomy new evidence has come to light whenever the complacency that we have now understand everything has set in.

In this context, the following comment of Fred Hoyle comes to my mind:

> ...I think it is very unlikely that a creature evolving on this planet, the human being, is likely to possess a brain that is fully capable of understanding physics in its totality. I think it is inherently improbable in the first place, but, even if it should be so, it is surely wildly improbable that this situation should just have been reached in the year 1970...

Hoyle made this remark at the Vatican Conference of 1970, when several cosmologists were making very categorical remarks about the universe. Indeed, a number of issues came up in cosmology in the post-1970 era, such as dark matter, superclusters and voids, the inhomogeneities of the microwave background, etc, which altered the ideas of 1970.

Jayant Narlikar

Our perception of the universe is continually growing with the new information that our observing instruments have brought in the past and will no doubt do so in the future. No doubt there will be new generations of space telescopes circling the Earth, some of them even doing so with location on the Moon. More spacecrafts are planned to Mars. Dare we hope that they will bring evidence of fossilized life (or even existing life) on our neighbouring planet? Several modest attempts are being made under the SETI (Search for ExtraTerrestrial Intelligence) programme to search and establish the existence of alien cultures in this vast universe. If these attempts bear fruit it will surely be the greatest ever finding in the history of human civilization. In the 1930s when the Palomar 200-inch telescope was being planned, it was considered a major step forward in observational astronomy. At a press conference given by the promoter of the project Edwin Hubble and the distinguished astronomer Arthur Stanley Eddington, the question was asked to these scientists: 'What do you expect to find with this telescope?' Their rejoinder was: 'If we knew the answer, there was no purpose in building it.'

So let us hope that the next century will bring us fresh surprises and challenges: for the human intellect feeds, progresses and prospers only if it gets taxing challenges. ❑

Medicine in the New Millennium

DR SAIBAL GUPTA

Dr Saibal Gupta is one of the foremost cardio-thoracic surgeons of India. Though based in Calcutta, Dr Gupta has been travelling all over the globe, both for the sake of the advancement of medical treatment as well as for pilgrimage, and has been training numerous young doctors over the years. He is also a prolific writer, contributing articles to many journals. Amār Samoy *is a collection of his brilliant essays. Along with this article, we publish pictures of only a few benefactors of humanity, hoping for more to come soon.*

Medicine is as old as man himself. Even the primitive and prehistoric man had performed surgery and treated diseases. But the really explosive advances in medicine have occurred during the last two centuries of the second millennium, and of them, the advances during the previous century have been far more spectacular than those of the previous centuries put together. It is not possible to imagine the advances in this new millennium just as it was impossible to imagine the medical scenario of 2000 AD in the year 1000 AD. But unlike 1000 AD, we can today see the direction along which medical science is likely to advance during this new century and beyond, if not the whole millennium. This is probably true with many other human endeavours. We are able today to foresee the future much more than the human beings of the first millennium. This far-sightedness is an attribute of the expansion of human consciousness in the process of the evolution of man. What used to be in the perception of a few is gradually becoming the attribute of many. Even science fiction is only about 400 years old.

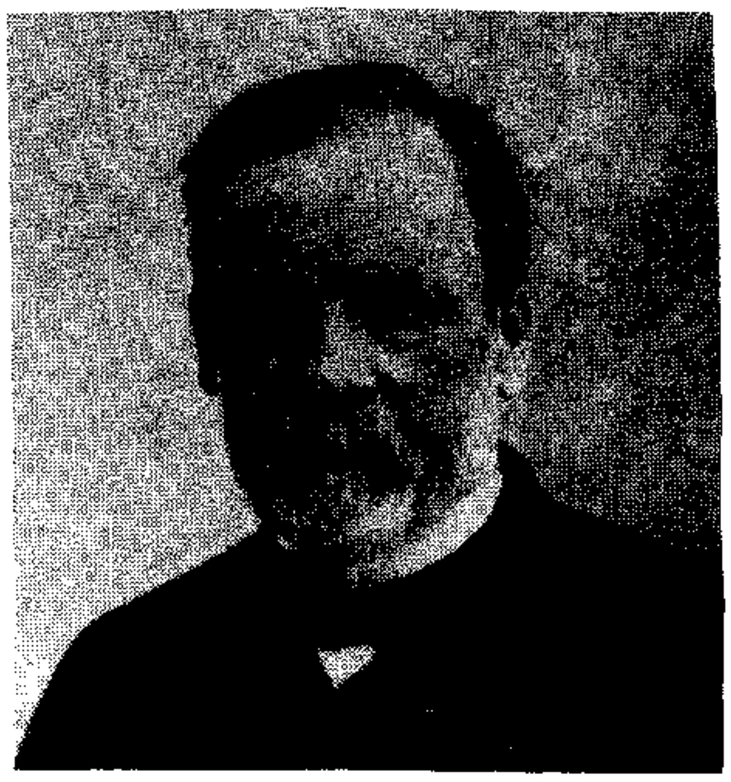
Edward Jenner inoculating his son

It is difficult to discuss in detail all the frontiers along which the medical science is progressing, because the field has become so vast. It is also impossible for one person to know what is being contemplated or researched on in each of these fields, because they are still in the minds of the researchers or in the laboratories. But what has been achieved gives an indication of what is likely to happen and the description is bound to be scattered. Let us consider the different frontiers.

IMAGING has been the spectacular advancement of the 20th century. The discovery of the X-rays by Roentgen allowed man the first insight into his body in the living state. Since then advancement of imaging techniques have encompassed computerised tomography (CT), ultrasonographic imaging (USG), magnetic resonance imaging (MRI), positron emission tomography (PET) and nuclear imaging. Each of these imaging techniques has undergone progressive refinements, bringing in newer technological additions, more accurate analysis and widening the scope of applications. It is almost certain that the existing technologies will become more refined, and newer technologies will come so that the whole interior of the human body will be visible in progressively greater detail. Already it is becoming possible to see the coronary arteries and even judge the extent and progress of atherosclerotic disease inside. Eventually even the chemical compositions of tissues and any

abnormalities in them will be visualized. With progress will come miniaturisation just as the first computer made in 1946 filled one whole room and was crude and limited in function compared to the present-day palmtop computer. Advances in computing will further advance the function and miniaturisation of imaging and one can imagine hand-held imagers giving a complete picture of the inside of the human body.

NUCLEAR MEDICINE has been one of the great beneficial effects of nuclear research, which started off with the research on man's destruction. Its benefits to medicine have been both in the fields of diagnosis and treatment. Radioactive isotopes have been used extensively in studying organ functions, blood flow patterns, scanning, uptake, and elimination of electrolytes and chemicals to study the functions of organs like the heart, thyroid, etc. Their uses in research into cellular and molecular functions, which are fundamental to the processes of life itself, have been invaluable. They have been used in the treatment of both malignant and nonmalignant diseases, and are the mainstay of therapeutics in many areas. It is remarkable that the medical science and treatment modalities have undergone such an extensive and fundamental change only during the last 25 years. The changes are likely to continue.



Louis Pasteur

INTERVENTION is a word, which was not known to medical science during the first three quarters of the 20th century until Gruentzig in Germany introduced a balloon on the tip of a fine catheter to dilate a blood vessel in 1977. In the short time thereafter, the field has exploded into angioplasty of blood vessels of the heart, limbs and a number of different organs wherever blood supply is falling. It was followed by the use of mechanical stents, of stents lined by angiogenetic drugs, living cells or even genes that are expected to stop the process of degeneration. Intervention is not only used to increase blood supply where there is too much or where there is bleeding. Intervention techniques have been used in other body passages with sensors, imaging, and even miniaturised camera eyes, looking into even smaller and narrower areas. The future scope of intervention will keep on expanding.

NONINVASIVE SURGERY is also a term coined during the last quarter of the 20th century. The field of surgery made great advances during the 20th century in surgical treatment of all the areas of the human body. Advances in anaesthesia, blood transfusion, knowledge of human physiology, pathology of diseases, technological advances, all contributed to allow surgical treatment of more and more delicate areas so that it spread out into different specialities, each of which became a vast subject. It became enough for one doctor to master the art and science of one organ only in his lifetime. Most people learn only a portion of it, whereas at the turn of the 19th century, one surgeon could do all the operations possible on the human body. This will give an idea of the enormous expansion of knowledge.

Till the last quarter of the century the practice of surgery has been to cut open the human body to tackle the diseased area. This has since moved away with the possibility of doing some operations without cutting open the body. This has been made possible by the use of optical probes and by designing instruments to operate from outside through small portals. Though it started with abdominal surgery and specifically in operations on the gall bladder, the use of the technique has now been extended to different specialities.

The idea of operating inside the human body without violating it too much has extended into the use of robots to perform sur-

Selman A. Waksman:
Streptomycin

gical procedures under outside guidance. This has brought in the subject of ***ROBOTIC SURGERY*** in recent years. Robots have been used to operate on the heart, in orthopaedic surgery, and in some other areas. The subject is in its infancy, but it is possible to visualize further improvements in future years with great sophistication and microminiaturization of robots to perform more and more delicate operations. The science fiction stories of introducing robots into the blood stream to carry out operations at a specific site may come true too!

TREATMENT OF CANCER is in some way related to life itself—life as seen in a single *cell,* in why and how it comes into being and why and how it dies. How is the dynamic equilibrium of a human body maintained, the body that we call life? Therefore one of the greatest challenges baffling the medical science of today is how to prevent and how to treat cancers.

Cancer is not a single disease but a group of diseases characterized by a profusion of cells either by excessive generation or by reduced elimination. Each cancer has a different causative sequence, different biochemical character and therefore different treatment modality. Drugs are progressively being designed on the differing needs of each type of cancer cells to make them more and more specific to the disease, but there is still a long way to go. Progressive sophistication in surgery, chemotherapy and radiation therapy is bringing more and more patients to the possibility of cure or long-term containment of the disease. Meanwhile, the incidence of cancer is rising with the rising age of population, greater and more varied exposure to radiation and chemical injury, and lifestyles. But ultimately a solution will be found—not a unitary magical solution perhaps, but an approach, which will be varied and probably connected to the secrets of life itself.

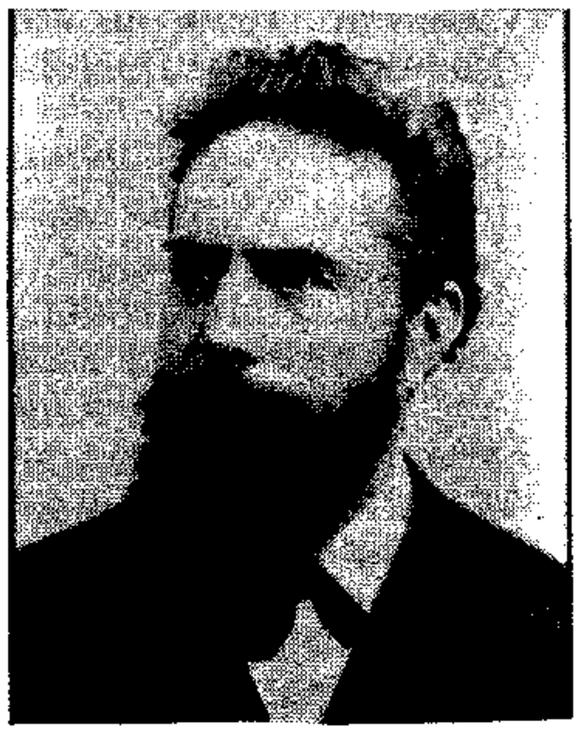
MATERIAL RESEARCH, BIOCOMPATIBILITY AND IMPLANT RESEARCH have been major activities of the 20th century. The research to find out new materials, such as new alloys, plastics and polymers which are not rejected by the body tissues because of their biologically inert and nonreactive nature, has led to the profusion of synthetic organs or parts thereof. Thus from artificial implantable lens in the eye, artificial joints of limbs, cardiac pacemakers to artificial heart, everything is a result of such research. Apart from implants, every material that is used in the human body from catheters to ordinary syringes for injection, are all results of such research. Much of this research is a fallout of defence and space research and they enrich our life without our knowledge—from toys for babies to fashion garments for ladies. Meanwhile, in the medical field, the race is still on between an artificial heart and a transplanted heart.

TRANSPLANTATION surgery has come a long way since early blood transfusion and the discovery of blood groups by Landsteiner. Almost all the organs of the human body, apart from the brain, have been successfully transplanted from one human body to another—either from a living donor or a dead donor. But it was found out quite early, actually during the Second World War, that tissues from one human being are not accepted by another and rejection occurs after a specific period. It was also found out that the difference lies in the genetic structure. Rejection does not occur if the transplant is done between two identical twins as they have the same genetic structure. But apart from this, the possibility of finding identical genetic structures between two unrelated individuals is about one in ten million or more. Blood related individuals have some similarity, and even some unrelated indi-

Christiaan Barnard:
First Human Heart Transplanter

viduals can have a high degree of similarity; but never a 100% similarity. Foreign organs will therefore be rejected after some time. The solution to this problem has been sought by producing ***IMMUNOSUPPRESSION*** with drugs that retard the rejection process. But these drugs also lower the recipient's resistance to infection and disease and cannot be used indefinitely or are not effective indefinitely in safe therapeutic dosage. Extensive research is continuing to make safer and better drugs, or for making antiserum, or vaccines against the patient's body, or defence cells which can be used in accurate quantities. There will be further progress in this field.

A second approach is to use a phenomenon known as ***IMMUNOTOLERENCE***. It was found that if a newborn mammalian baby, or one still in the mother's womb, is sensitised by another person's cells or genetic material, the baby's defence system becomes tolerant to the tissues of the donor and the donor's organ can be transplanted later without rejection. This has been tested in experimental animals and has not yet been tested in humans. Different animals achieve their distinctive character of tissue antigen or ***IMMUNOCOMPETENCE*** at different periods after gestation, and it is presumed that the human foetus gets it quite early in the womb. Theoretically, however, two foetuses can be made to behave like identical twins antigenically by exchanging their genetic material early in life. There are, of course, other less spectacular ways of inducing immunotolerence.



Wilhelm Conrad Röntgen

The third possibility is to produce identical twins or immuntolerence by ***CLONING***. This is a technique by which the genetic material from one person is used to produce multiple replicas. This has been done in animals but not in man because it has so far been banned in most societies, since it can be used for much sinister use than of benefit to man. On the credit side, a future Einstein can be cloned to produce a generation of Einsteins. There are many ways by which cloning can be done—by the use of reproductive cells, genetically engineered ordinary body cells or by the use of potent cells from some areas of the body. Cloning from an ordinary body cell became successful in experimental animals only in 1999. Some people are thinking of producing ***transgenic*** animals by genetic engineering and cloning, which will produce animals with a tissue antigenic structure similar to man's. The organs from such animals can be used for transplantation. Though such piglets have been produced, successful transplantation has probably not yet been done.

GENETIC ENGINEERING AND GENE THERAPY are largely synonymous terms. It involves two different parts—the genetic engineering on reproductive cells and that on somatic cells. Genetic engineering on reproductive cells has been partly dealt with in cloning. It can also be used to eliminate genes of hereditarily transmissible diseases from the yet unborn foetuses. The second variety eliminates diseases which are hereditarily predisposed, such as diabetes and multiple sclerosis. These are still in the experimental stage and in some cases early success has been achieved. Genetic engineering to make insulin-producing cells in the body of a diabetic patient will probably come in a not too distant future. Significant research on this line is being done in India in the case of haematological diseases like thalassaemia and sickle cell anaemia, which are very prevalent in our country, and solutions are likely to come in the near future.

Another field is the ***RECOMBINANT DNA TECHNOLOGY*** by which specific human genes are introduced into bacteria or mammalian cells and they are cultured to commercially produce the desired protein in

pure form on a large scale. Examples are the recombinant human insulin, growth hormone, beta interferon, erythropoietin, etc. They have revolutionised therapy of those disease states.

Another process called ***PHARMING*** transfers such genes into the mammary glands of lactating livestock like cows, goats, pigs, etc, which then produce milk rich in the specific protein and can be isolated easily.

In addition, genetic materials have been used for angiogenesis or the creation of new blood vessels and for the regeneration of vascular endothelium to prevent recurrence of atherosclerosis, a disease that blocks arteries.

As years go by, these fields will be investigated extensively and will bring in treatments for many disease conditions which are hitherto treated unsatisfactorily.

BIOETHICS is a branch of applied ethics, which has come in as a result of all such advances in biological research. It is a discipline dealing with the ethical implications of both biological research and the applications of that research, especially in medicine. This field involves the cooperative efforts of philosophers, physicians, scientists, lawyers and theologians. An ethical evaluation of how far man should push the research is exercising the minds of all thinkers. One finds remarks on the Internet from people involved, such as 'a profit-making technology will not benefit the common man.' Advancements in biotechnology will alter man's life more drastically than other technologies that have come before. How far man's psyche will be able to tolerate this is a question which future generations will have to answer.

Gregor Mendel

Meanwhile, research goes on like a bull in a china shop, smashing boundaries. It is still man's profit motive that eggs on this research in addition to the scientist's thirst for knowledge. Concern for humanity comes very low in the order as millions die the world over through malnutrition and simple preventable diseases. Science is neutral in the matter of good or bad till now—will science touch that place too? One of the central questions of modern ethics has to do with whether human actions are to be judged right or wrong solely according to their consequences. Are their ethical values beyond those of simple survival? Is there wisdom beyond knowledge?

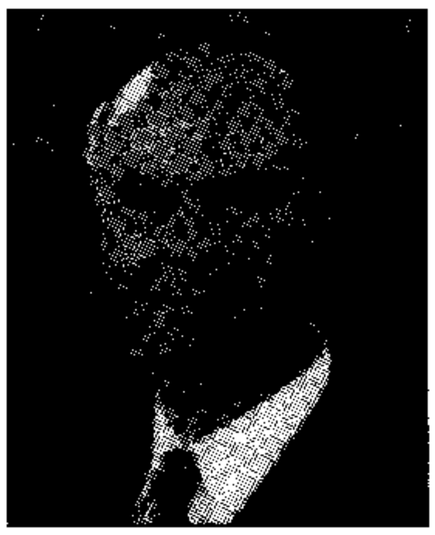
PREVENTIVE MEDICINE is more than curative medicine in maintaining a healthy population, and an investment in preventive medicine brings in a greater dividend in the long run as has been proved in many countries. From preventive medicine has come the concept of ***POSITIVE HEALTH***. The aim of preventive and social medicine is not just to prevent disease but to bring about normal growth of the physical and mental faculties to make a healthy population. In this field India is unfortunately backward, and falls below even some underdeveloped countries.

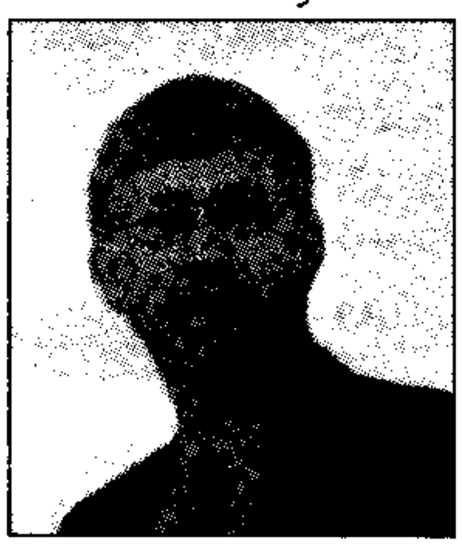
Modern technologies are also helping preventive medicine. Modern methods of keeping and analysing demographic data for disease trends, identifying new and virulent organisms and their neutralization, researches on the relation of diet and living habits to disease, modern methods of sanitation, safe drinking water, etc, will make the future world much healthier. Genetic engineering will eliminate hereditarily transmissible diseases. Greater spread of education and identification, and adoption of a generally accepted ethical value system will produce a much healthier and integrated world population of tomorrow. This is what is hoped for, but will it happen?

Scientific progress has been made in ***ENVIRONMENTAL MEDICINE*** in the last decade. Continuous monitoring of the environ-

ment to detect pollution and harmful biological and chemical elements has become a necessity in the modern world. ***BIOSENSOR TECHNOLOGY*** is being applied for continuous monitoring of the environment. This technology has been extended even to the detection of explosive materials used by terrorists. It has also become an environmental hazard.

SPREADING THE BENEFITS OF RESEARCH TO COMMON MAN is as difficult a task as making sensational medical discoveries. In affluent countries these advances benefit the common man to a much greater extent than in underdeveloped countries but still a significant gap remains in extending the benefits. In underdeveloped countries the gap between knowledge and application is big. The profit motive, which largely guides medical research and its application, is stimulating progress today but is basically a self-defeating mechanism, which will undermine the social validity of medicine and even to some extent, its progress. The high cost of modern medicine makes it unavailable to the common man in poorer countries. Scientific research on poverty and poverty-related diseases are not rewarding to an equal extent. The world is shrinking and the resentment of poor people will make itself felt not only in some countries but worldwide. Nowhere is this felt so acutely as in India where the intellectual content is high, but not the social structure and the will for mass benefit. The world's politicians, economists, philosophers, etc, must find a way out of the present money-oriented global system. This is probably the greatest research humanity will have to undertake and solve very early in the new millennium. A cry is arising out of the capitalist countries themselves against global capitalism which is crushing man's individuality to non-existence.





Craig Venter and William Collins

WHERE WILL IT ALL LEAD? is a question which troubles many. Will man become immortal? Will he become a god and impose his will on the entire biological system of the earth and beyond, deciding what lives and what does not? Can man handle immortality? Biological and biotechnical research which are the bases of medicine are in a position today where physical sciences were a couple of centuries back. It has just begun and one can put one's money in it today for a good return. Today everything seems achievable and within reach. It only needs intellect, enough financial input and determination to get to the bottom of it all, to solve the mystery of life itself. It seems probable that as it continues to progress it will find itself ultimately, like physical sciences, at the brink of a great indeterminacy where its victorious chariot will stop and doubts emerge. In the physical sciences the great indeterminate barrier between microcosms and macrocosms is hanging like a veil hiding the Reality. Some physicists go to the extent of saying that this veil cannot be lifted as this relates to man's existence in this Reality. In biological science, as the quest goes on from cellular through molecular to energy levels, at some point the great veil of indeterminacy will probably be encountered, as ultimately all sciences boil down to the same thing—the human mind. The clone of Einstein may turn out to be not a great physicist, but a clever mechanic, a spacecraft pilot or even an intelligent and dangerous criminal. Man will then probably get bewildered as the great veil of indeterminacy descends. He will then be meek and humble and say like Rabindranath Tagore: 'You are standing just beyond my songs; my tunes touch your feet, but I cannot reach you.' The further we progress the further the Reality and Life recede into the shadows of the veil, into the shadows of our perception. ❑

Science in the Immediate Future

A purely nonprofessional view of what science should be in the future is being presented here. Along with this article, we are publishing a pictorial tribute to only a few of those great savants of science, whose discoveries have benefited humanity immensely.

The Beginnings of European Science

Science is the study, utilization, and manipulation of nature. European science had its birth in not so distant a time in history. During the late 14th and the early 15th centuries, the world saw the greatest epidemic, the bubonic plague, which virtually wiped out half of the human race. When villages, towns and cities were strewn with decaying bodies, when vultures were having their fullest swing, when what remained of humanity wept and looked at everything sadly, the great system of European science was born.

Thomas Alva Edison:
Electric Bulb, Audio Recording, etc.

Science, however, isn't new to mankind. Almost all the ancient civilizations had contributed their scientific mite to the well-being of the world around. But nothing paralleled the contribution of European science during the last five or six centuries. What began simply as a thought and a doubt emerged as a chain of revolutions—the Industrial Revolution, the 'electrical' revolution, and now, the electronic revolution—inundating the world with an altogether new system of thought, and creating an altogether new way of life. Today, to remove science from the world is to kill it.

Science has two chief purposes: one is to eradicate superstition and ignorance, and the other is to make living easier. The first concerns knowledge and the second, action. Human beings have three mental faculties: thinking, willing and feeling. Thinking concerns knowledge, and willing leads to action. We shall first study the thinking portion of science and then go over to the willing portion.

The Science Concerning Thinking

European science concerned itself initially with thinking. Before the Renaissance, the world was not lit brightly, at least from the scientific point of view. People didn't know much about other cultures and peoples. And there were so many superstitions. We thought, for example, that we were created by some power out of mud. We thought the wind blew because God breathed. We thought the earth is like a flat dish, around which the sun and the moon and the stars circle with devotion. We thought the sky above us is an enormous lid, lit with sun and stars and covered on us by God. Such superstitions were endless.

Rudolf Diesel:
Diesel

Science began to ask questions initially about the world around us: What is the sun doing? Is he stationary or circling round the earth? What about the moon? What are those twinkling stars? To ask questions in a world ridden with superstitions is not always wise: Some people, named heretics, had to sacrifice their lives too. But still science went on. Just looking at the night sky with the naked eye wasn't sufficient, science realized. It began to manufacture lenses at first and then went on to build observatories. These instruments brought many answers to the hitherto unanswered questions. This science of studying the outer world was called astronomy, which branched out further as the science developed, and today we are in a position to know what's there on Mars and what's there thousands of millions of lightyears away. The contribution

Samuel Morse:
Telegraphy

G. Marconi:
Radio

of Italians and Germans to this science is remarkable indeed. About what this science is going to do in the near future, you have already read in Professor Jayant Narlikar's remarkable article. Apart from studying the sky, the stars and the planets, there was the study of the motion of objects—big and small, of light, of heat, of magnetism, and so on, each branching out into independent sciences and contributing mightily to the welfare of the world.

Even as this went on, there were others who became interested in things on this earth itself. What is the air? What does it contain? What does water contain? Thus were born scientists like Antoine Lavoisier (whose life was sacrificed on the altar of truth in 1794), who finally contributed the Periodic Table of the Elements, a complete chart of all the elements in the world. This subject was broadly called chemistry, and it branched out into numerous other subjects subsequently. And this study also led to the Industrial Revolution.

Then there came some people who wanted to explore places, peoples, and life immediately around us. The Spanish and the Portugese became attracted to seeing the world beyond the sea around them. Great men like Galileo had already declared that the earth was not merely a flat plate but was spherical in shape. So adventurers explored the world.

Such explorations made them discover newer lands and newer peoples, all right. But they also became interested in the innumerable animals and plants that were seen in those new places. Thus began the third branch of science: biology. Searching for newer and newer species of plants and animals, classifying them into broad groups, naming them, finding their uses to humanity—all this led to the creation of many branches in biology. Charles Darwin is a big name in the history of biology.

Elias Howe:
Sewing Machine

Not only did scientists study the various animal and plant species everywhere, they also came nearer home and began to study the human body and its various functions. The question of how to keep the body healthy, strong, and young became uppermost in the minds of numerous scientists, leading to astounding medical advances. Chemistry contributed not a little towards this development. Today, biology has become vital to our lives. It promises much now, far more than what we thought it could. The future depends on biology, so to say.

Thus the three sciences—physics, chemistry, and biology—grew independently of one another and achieved impressive success. Human knowledge increased by leaps and bounds. However, though physics developed its own way, biology its own way and chemistry its own way, there came a time when they needed to shake hands. For sciences to grow in isolation became increasingly difficult with the advance of knowledge. As science advanced, the study of smaller and smaller units became imperative. As biology went to understand the tiny units of life, as chemistry struggled to know the heart of the atom, and as physics studied the deeper causes of creation of the universe and began to discuss matter in terms of energy, it became increasingly clear that no science can develop independently, in isolation. In spite of dividing the three main streams into many smaller streams, calling them specialities, a time has come when the study of the one without knowing the other is becoming impossible.

Nikola Tesla:
Electric Coil

Thus, at the dawn of the 21th century, science stands at the cross-

Alexander G. Bell:
Telephone

roads. Chemistry, physics and biology have criss-crossed each other. Physics, for instance, finds biology indispensable in furthering its knowledge: to know if life ever existed in Mars or Jupiter, physics needs biological knowledge. Again, while studying the genome, biology finds that it is all chemistry inside.

Where will all this lead? Swami Vivekananda's remarkable observation is as follows:

> Science is nothing but the finding of unity. As soon as science would reach perfect unity, it would stop from further progress, because it would reach the goal. Thus Chemistry could not progress farther when it would discover one element out of which all others could be made. Physics would stop when it would be able to fulfil its services in discovering one energy of which all the others are but manifestations... (*The Complete Works of Swami Vivekananda*, 1989, Vol. 1, p. 14).

The Science Concerning Willing

What we discussed till now is the growth of science along intellectual lines. The other contribution of science is in the field of inventions—the field of action. From the simple needle to the supercomputer, scientific inventions have been countless and splendid. Whoever knew that one day there would come a machine using which we could capture a 100%-perfect picture of our dear ones in a moment? Whoever thought there could be light just by pressing a button? Whoever dreamt that we could hear world-renowned musicians at the press of a button anywhere and everywhere? Whoever thought we could fly in the air, talk to people around the globe, travel so fast in locomotives and buses and cars? Whoever thought that we could see what's happening somewhere in USA on a TV screen, sitting in a corner in India? Whoever imagined there could be such a flood of books, magazines and newspapers? And whoever guessed there could be electronic mail or the Internet? Alongside such universally beneficial inventions, there were other smaller ones, which have been helping people greatly. Take the case of medical inventions alone: From the commonly known vaccination to the artificial heart, we have come a long, long way; Dr Saibal Gupta's article has discussed them beautifully and hopes for more. Those great scientific masters who strove all their lives to benefit humanity are like the great Indian sages who declared: *'Kāmaye duḥkha-taptānāṁ prāṇinām ārti-nāśanam,* I only want to bring solace to the suffering millions.'

Ottmar Mergenthaler:
Automatic Typesetter

Christopher Sholes:
Typewriter

The Adverse Effects of Science

But, alas, there's the other side of the coin too. While science began out of curiosity, leading to the knowledge of the essential properties of nature and inventions, it led to an important consequence: the control and manipulation of the fundamental elements in nature. This in turn led to the Industrial Revolution during the 19th century. This revolution shepherded nations towards competition, and competition led us to wage more wars. And in order to succeed in wars, nations needed more and more powerful weapons. It fell to the scientists' lot to manufacture such weapons of mass destruction. Manufacture they did, and the result is what it is now. We have already fought two World Wars. We have sacrificed millions on the altar of science. Today, as we stand on the lowest step of the new-millennium ladder,

Charles Babbage:
Computing Machine

Benjamin Franklin:
Spectacles

Jagadish Chandra Bose:
Plant Life

a proud moment when three Indian kids will study Mars, we are left with the question of our own planet's survival. There are such terrible weapons now that life on earth could be wiped out overnight. It all depends on someone's mad will to destroy the world. Terrorism has wiped away much of the world's civilization, and many races live under constant fear today. We quote from Professor Alan Hunter's article, published in our December 2000 number:

> In the 1990s, a new term became current: ethnic cleansing. An older one, genocide, had to be resurrected. Potentially rich countries like Angola have become wastelands: over half a million people died in a civil war that brought no victors, only suffering. Kabul, a once-thriving and colourful city, has become, in the words of one observer in 1998, mile upon mile of rubble and dust, abandoned and windswept, populated here and there by ragged families eking out their survival inside abandoned truck containers that have been sawn in half. ... The warring militias had spared nothing: the blue-domed mosques, the minarets, the hospitals, the schools. The Kabul museum, which once housed collections of early Buddhist relics, lay open to the sky, its ancient columns lying about on the roadside, its collections looted.

Let alone weapons. Even commonplace gadgets could be destructive. Even the ordinary things that we use in our everyday lives can cause harm to the environment and to ourselves. The number of deaths due to accidents—air, water and land—are too numerous to mention. Rare animal species are getting extinct; aquatic life is dying fast; forests are being been wiped out; rivers are becoming untouchables; and the air is poisonous—all on account of the ever-increasing amenities we are developing, in order to satisfy our ever-increasing needs. Pure drinking water is a myth, and so 'mineral water' is the solace. The food we consume is costly, contaminated, and unsafe. Glaciers are melting at a faster rate than they did in all the last thousand years, and so water depletion is the new terror. The ozone layer has been affected. Nature has become artificial.

While biology promises a new, disease-free world, it also brings the alarming concern that cloning may create problems, and genetic tinkering may cause our foodstuff, and ourvelves, to become abnormal. Escalating prices is another cause of serious concern. The power problem has caused governments to tumble. Fuel is becoming dearer. Above all this, ethics and morality are another question. Morality now is perhaps at an all-time low. All these have led to the difficult problem of tension. At no time in the history of humanity were human beings so tense as we see now.

In this way, while during its five-hundred-year run science has created a new world for us to live in, this new world is not without horrible dangers.

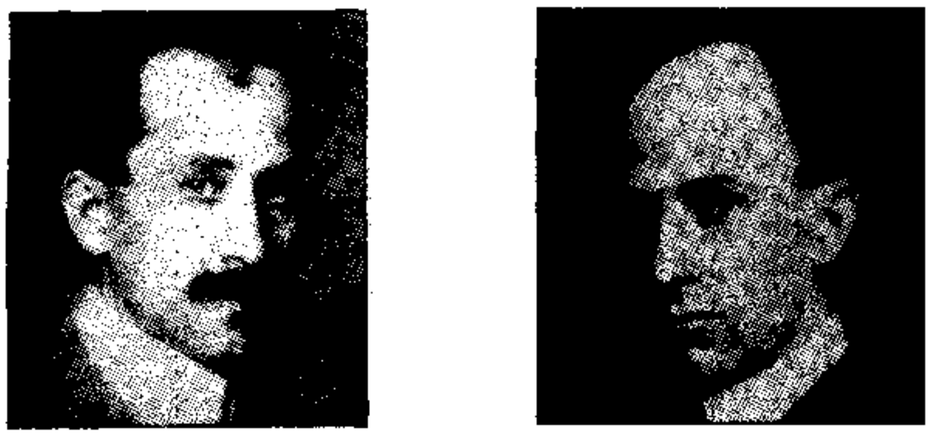
The Science Concerning Feeling

So we need a science of feeling now. We have had the science of thinking as well as the science of willing; now's the time for the science of feeling. What is the science of feeling? The science of feeling is the science that averts destruction and helps construction along positive lines. Moreover, this science is ethical. Science has done immense benefit to humanity by destroying false knowledge, and by inventing innumerable gadgets to help us. It now needs to rediscover the human being. The reason?

George Eastman:
Popular Camera

Bill Gates:
DOS Windows

Why aren't we



Orville Wright and Wilbur Wright:
Aeroplane

happy in spite of all that science has achieved? Why are thousands dying owing to natural calamities in spite of our conquering nature? Why have we failed to end human suffering? Why wars? Why destruction of nature and pollution of natural resources? Why is population increasing at an enormous rate, making the world poorer and poorer? Why are so many patients dying each year in spite of the best medical facilities available all the world over? Why so many accidents in spite of the best services promised by the concerned departments? Why do we know so less in spite of knowing so much?

All 'why's' could perhaps be answered when there is more stress on feeling. The science of the future should be more of feeling than of willing. What is meant by this?

There has been not much care for life, for the individual, the person, the consciousness, behind the phenomena that science has been studying. The telescope should turn inwards, towards man. Science is supremely objective in its approach. It must enhance its subjective element to sweeten its efforts. The first thing, therefore, that science should consider in the future is consciousness. The Uncertainty Principle has already shown that the observer is as important as the experiment itself, if not more. The observer is the person, the enjoyer, the 'consumer'. It is 'consumer-oriented' science that is needed in the future. For such a science, there should be some ethical code, based on this fundamental axiom: 'Myself last.' Says Swami Vivekananda:

> Ethics always says, 'Not I, but thou.' Its motto is, 'Not self, but non-self.' The vain ideas of individualism to which man clings when he is trying to find that infinite power or that infinite pleasure through the senses, have to be given up—say the laws of ethics. You have to put *yourself* last, and others before you. The senses say, 'Myself first.' Ethics says, 'I must hold myself last' (*The Complete Works of Swami Vivekananda*, 1989, Vol. 2, pp. 62-3).

Thus science has great future scope in disarming the human being. It needs to discover gadgets to undo the harm the earlier gadgets have been doing. Scientists have to find out powerful weapons which can undo the powers of the existing killer-weapons.

The Scope and Prospects of Science

Having studied the sciences of thinking and willing and also having stressed the necessity of the science of feeling, we are led to the scope of science. To know the future scope of science, we shall have to know what we need badly today and what will be needed tomorrow.

While the 19th century began with the world's being awed at the marvels of industrialization, the last century began with the world's marvelling at the wonders of electricity, the camera, and the motion picture. This century has begun with the world's marvelling at the wonders of electronics. Industrialization brought efficiency, ease in functioning, and perfection in products; at the same time it began to bring people together, physically. Electrification, the cinema, etc, brought people nearer still. Electronics—the Internet specially—has brought us far more closer now. The famous 'global village' concept has come to pass. We don't know what is in store for the people of the next century. But we can guess that they may as well step into a world which even Aladdin's demon can't create.

Science aims at inventing smaller and

Shockley, Brattain & Bardeen:
Transistors

smaller items that work at a faster and faster rate. The industries of the 19th century were huge structures, manufacturing things at an ordinary pace but in a better way than what human labour could achieve. The 20th century perfected the machines so that smaller ones replaced the big, old ones; and these machines worked faster. We are seeing electronic gadgets today which are still smaller and more efficient. Who knows that tomorrow the gadgets may become so small that they would be eliminated and people would have mental Internet connections? Then the term 'global village' may be replaced by 'global home' or something much nearer.

The possibilities are endless: One day we may see books and periodicals in museums even as electronics may take over. Schools and colleges may become items of history and only electronic media could be the source of education. Architecture, art, physics, medicine, law, publishing, economics, and a host of other branches may become obsolete and the computer could take up their places. In the field of thinking, we may cross many barriers of space and venture forward. Though the power of knowing everything isn't given to the puny creature called man, we can still hope to know much more than our ancestors did about the twinkling stars above us. While we are very near the String Theory which promises to unite all the four fundamental forces of nature, we also hope to proceed further on. Who knows if the scientific world should stumble upon a fifth force—the force of the human being—and even a sixth force, the force of the Unknown, and try to 'discover' and analyse them? Down home, we hope that the scientists will go farther and farther into the human being, discovering causes for his misery and suffering. And who knows when one day our scientists would be able to control life itself?

Life is sacred. So the prospects of science are plenty. Science should strive its utmost to save life. Reforestation, protection of wildlife, preservation of vanishing species, safeguarding human life, and purifying the environment should be among its priorities. Its other important agenda could be saving life from natural disasters: cyclones, rains, etc. Medical treatment could become cheap and surgeries could become non-invasive, thereby saving millions of poor lives. Science should discover means of bringing to an end noise pollution. It could also help restrict population boom. Science has the onerous task of discovering some alternative to the common man's fuel. The future has all these achievements in store for science.

A disease-free, pollution-free, war-free, weapon-free, misery-free world is Utopia no doubt, but science can struggle to achieve at least some great height in this regard. ❑

The Oneness of Life

Every day we find that the wall that was thought to be dividing one thing and another is being broken down, and all matter is coming to be recognised by modern science as one substance, manifesting in different ways and in various forms; the one life that runs through all like a continuous chain, of which all these various forms represent the links, link after link, extending almost infinitely, but of the same one chain. This is what is called evolution. ... From what does this evolution come, is the question. What was the seed? It was the same as the tree. All the possibilities of a future tree are in that seed; all the possibilities of a future man are in the little baby; all the possibilities of any future life are in the germ. What is this? The ancient philosophers of India called it involution. We find then, that every evolution presupposes an involution. ... From the lowest protoplasm to the most perfect human being there is really but one life.

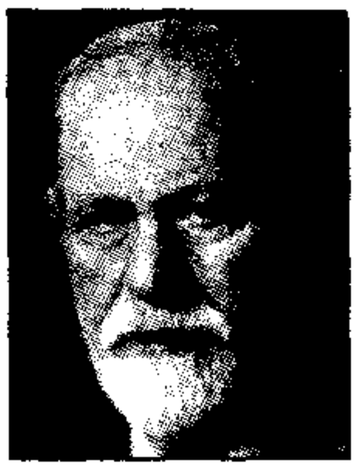
—*Swami Vivekananda*

Expectations from Psychology

What does the world anticipate from psychology? Here's an attempt to contemplate the future scope of this great science. We also print pictures of a few giants of psychology here.

The World Health Organization has declared 2001 as the Mental Health Year, taking into consideration the appalling increase in the number of mental cases. What a sad way to begin the new century and the new millennium! But one can't help, since the situation is going out of control day by day. A *Times of India* report stated recently that the organization has clubbed mental illness along with cancer and tuberculosis!

It is estimated that nearly 35% of the world's population suffer from psychoneurotic reactions like mood variations, depressions, stress, anxiety, obsessions, and so on. Suicides have become outrageously common. Stress-related physical ailments are on the increase; stomach upsets, ulcers, etc are a run-of-the-mill affair in cities nowadays, and firms are minting money on antacids, famotidine, etc. In fact, most of the mental illnesses are found in urban settlements rather than in villages. Psychotic cases are plenty. In spite of the advances in psychiatry, the treatment of most severe mental ailments is still 'primitive' and a long-drawn process. With all the goods that psychiatry guarantees, the truth is that once a person becomes insane his or her life is doomed. Let alone social ostracism, the person cannot thrive once again under the present medical and social situation.



Sigmund Freud

The World of Psychology

There was a time, up to 1792 to be precise, when almost all the psychotic insane were chained for life. It was Phillippe Pinel who unchained them. Psychology has developed much since then. Sigmund Freud, Carl Gustav Jung, Alfred Adler, William James, Pierre Janet, Edmund Husserl, Viktor Frankl and a host of others are household names today. From the primitive methods of driving away 'demons', blood-letting, etc, through the chemotherapeutic and physiological methods like electroconvulsive therapy ('shock treatment'), neurosurgery, etc, to psychotherapy, psychiatric treatment has developed enormously over the years. Jung's analytical psychology, the Gestalt therapy, Adler's individual 'power' analysis, behavioural therapy, and such other methods are mature ones now. Counselling is the modern fad. Biopsychology, the idea that many behavioural traits are hereditary, has led to the development of psychogenetics.

Carl Gustav Jung

In spite of all these developments, the psychotic patient isn't unshackled mentally, though physically he is free. Let him alone; the innumerable neurotic cases need care but there is not much hope here also. No doubt border cases are being cured and there is relief to some extent. But mental doctors are unable to cope with the increasing number of cases. The chief defect with some of the usual techniques of healing has been the 'surface method' of approach. If there is a boil somewhere, just applying ointment on it will not do much. We need to take antibiotics. That is, we should go to the source. There is something higher behind us; there is something higher behind the mind and that should be awakened. If we are healthy, if our blood is pure, there is hardly any reason for a boil to show

up. The same is the case with mental health. Depression, anxiety, mood variations, etc, have a different source altogether. It is that source that needs to be taken care of. And the future developments of psychology need to consider this factor seriously. This is because the situation is getting worse day by day.

The Multitask World

As they say, life has changed but people haven't changed. The body can adjust to weather changes but the mind can't easily adjust to lifestyle changes. It takes time, but where's the time? The up-to-the-minute lifestyle is contributing not a little towards the growth of mental illnesses. The world is now rushing madly after the two allurements, 'woman and gold,' as Sri Ramakrishna called them. Money, especially, is the foremost in enticing people, though it is more volatile than the best volatile substance on earth.

William James

These days even knowledge—the Internet-based explosion of information—is not without the question of money. So the rat-race after wealth is bringing numerous problems in its train. Problems arise out of cutthroat competition. Today's big firms are tomorrow's paupers. Today's vital theory is tomorrow's junk. Survival has become the basic question. So there is tremendous tension. Such a mad rush after earning more and more has led us to a multitask world, where we are busy doing three or four things at the same time. Let alone the question of concentration, the question of mental health itself has assumed gigantic proportions. It is this struggle that leads to severe stress and other neurotic ailments.

Students are bewildered. With the problem of unemployment looming large, they are unable to decide which course to go for. Teachers are bewildered. The education they had is altogether different from what it is today. The workplace is a mess. There is a tremendous urge for bringing about the electronic civilization, and as a consequence, terrible demand for performance. The demon called lay-off scares employees at all times. Efficiency and intelligence is all that counts now.

After wealth, the second allurement is still more terrible. Its revenues have been horrible indeed. Broken families, divorces, estrangements, etc, are so very common that leading pure lives has itself become 'unnatural'. When tiny tots see their parents parting ways, and when they are led to orphanages, their suffering begins. As they grow, they become increasingly troublesome owing to the suffering, insecurity and anxiety endured in childhood. The so-called border cases, leading to further menace in no time, are rampant. Juvenile crime is a matter of course nowadays only on account of the loose family structure.

William McDougall

Nations are ready to destroy one another. This is leading to great mental distress everywhere. Terrorism, super-electronic wars, treacherous killing of innocents—all these are causes of grave concern. The military too is under stress and anxiety on account of all this. The information boom has resulted in flashing what bad thing happens in some corner of the world within minutes. Consequently, worry and tension become global.

Scope, Prospects and Proposals

What could be the best way to reduce mental illnesses? In what way could we hope for a sane society?

Of course we need to slow down: this is the first treatment. We need to give up this competitive way of living. But there is no hope of such a change in the near future, though there is the hope of downloading the mind itself into the computer, creating a file, asking a question to it, finding out the answer, and doing accordingly!

Prevention is better than cure. Treatment is good, but prevention is better. While there is much talk about preventive medicine in the physical world, there is not much in the mental world. So, psychology urgently needs to develop 'preventive medicine.'

The first thing needed is developing a 'personality psychology'; that is, to provide the best role-model. An ideal is what the world needs to follow. Cinema stars, pop singers, politicians, etc, are all good, and a lot of imaginary qualities are superimposed upon them; but they flicker for some moments and die away. Along with them, they drown the followers too. So there is the vital need of promoting great ideals. The best ideals are those who have conquered nature, external and internal. Such noble ideals alone can help the youth of the world today. In this ultra-modern period, when the world is madly after 'woman and gold', those great ones who have conquered lower propensities alone can remain strong ideals. This could be the new road of psychology: to project the best personalities, and the world will learn to live by.

Alfred Adler

The next thing necessary is emphasizing higher goals. Meaninglessness is an old problem. The higher the purpose of life, the greater the personality. When we seek higher goals, the lower ones are spontaneously taken care of. The person, society and nation are all as great as their goals and ideals are. Money, enjoyment, etc, are goals no doubt, but human life is not so cheap as to end in these mirages alone.

The third thing necessary is developing psychology to meet the needs of the computer and the genetic world. No one can imagine where the new world is leading us. No one can imagine the problems ahead of us. Psychology has to play a vital role in the future, not only because of the increase in the number of neurotic and psychotic cases but also because the world is tending to becoming more and more 'mental' than 'physical'. At no time was information so important and absorbing as now. Information has its good and bad effects. Psychology needs to gear up to tackle the bad effects—anxiety, stress, depression—that result from information technology. And then, the effects of genetics.

Over and above all, the important function of psychology is to stress inner strength more than weakness. Freud was sidelined by his student, Jung, because of his over-emphasizing the bad side of things. Similarly, psychology should stress the positive element in human beings now. But how will it do it?

Gilbert Murray

Enter the school! Crying over spilt milk is useless. Teach the children how to control their minds. Teach them the importance of mental strength. Children should know how to control, manipulate and utilize the mental potential. So psychology should venture into schools and colleges and train the young in bringing out their hidden best. The power of positive thinking and the power of prayer have been stressed sufficiently by Norman Vincent Peale and others. The use of prayer in psychiatry is already well known. It needs only to be emphasized further, and taught in schools and colleges. Just as physical training is stressed, mental training—the methods of concentrating the mind, the way of facing problems, etc—should also be stressed. This will lead to a mature citizenship in the future, and thereby, family problems like broken homes, divorces, etc, social problems like corruption, injustice, etc, and national problems like crime, war, etc, could be taken care of to a great extent. A healthy society could be envisioned then.

In short, if people are wallowing in dirt and mud, show them something higher—that's the function of psychology. ❑

Monasticism for the Future

PRAVRAJIKA SHUDDHATMAMATA

After studying the scope and prospects of the physical and mental sciences, we shift over to religion. The linchpin of religion and spirituality, monasticism, appears to be uneasy with modern civilization. But this primordial institution has nothing to worry; it will grow from strength to strength, assures Pravrajika Shuddhatmamataji, an American nun presently living at the Ramakrishna Mission Institute of Culture, Calcutta.

'The time of business,' said Brother Lawrence, 'does not with me differ from the time of prayer; and in the noise and clatter of my kitchen, while several persons are at the same time calling for different things, I possess God in as great tranquillity as if I were upon my knees at the blessed sacrament' [*The Practice of the Presence of God* (New Jersey, 1977), p. 29]. How many monastics today must identify with Brother Lawrence's 'noise and clatter' of the kitchen, and at the same time how many are earnestly striving for his 'great tranquillity'. Many changes have taken place in monasticism during this past century. In most countries one is more likely to see a monastic as a college teacher or hospital administrator than as a mendicant. At the end of the nineteenth century Swami Vivekananda completely changed the face of monasticism in India when he introduced the idea of monastics serving others in the spirit of worship. Though at first orthodox monks criticized the idea, their attitude has for the most part changed and now monasticism is beginning to enjoy a renaissance in India.

An Indian Monk: Swami Saradananda

In the West, however, when the Roman Catholic Church introduced sweeping reforms in their monasteries and convents in the 1960s, many monastics left their vocation. Today, the median age of Catholic monastics is 65. This shows that even now very few are joining. Vedanta convents and monasteries in America are having similar problems. Freer lifestyles and more career choices are also responsible for the decline in monastic numbers in the West.

Will monasticism be relevant in the future? Do monastics have anything unique to offer, or can their place be taken by social workers and teachers? Let's look at another side. Thanks to the latest information technology, never before have people been able to get such a vast picture of the madness of this world. And as a result, never before has there been so much religious, philosophical, devotional, and inspirational literature trying to answer this question. In the West, people are searching for answers more than they ever did before. As long as human beings continue to suffer from old age, disease, death, grief, and other things, there will be people who turn to the monastic life to attain peace—as Buddha did more than 2500 years ago.

What does it mean to be a monastic today? Why do monastics not live totally con-

Mongolian Lamas of Old

templative lives? Anyone who reads the lives of Sri Ramakrishna, Sri Chaitanya, Buddha, and other great saints,[1] can see that to live an intense spiritual life is not easy. Practising spiritual disciplines is like digging for gold, and the gold lies deeper than we think. Few people are capable of withstanding the intensity of this full-time. Why? There are two things that happen when a person cultivates inwardness of the mind through prayer, meditation, and other things: The first might be compared to peeling an onion. Layers and layers of extraneous things must go in order to reach the centre. The second could be compared to a drop of water merging in the ocean. The second brings joy, but the first can sometimes be difficult. Thus, our inner life tends to swing between bliss and existential angst. As Swami Brahmananda said: 'This period of spiritual life is extremely painful. Hope and hopelessness, laughter and tears—they alternate day after day until God is realized.'[2] This is why renunciation of external objects is absolutely necessary—not only renunciation of the objects themselves, but also of the desire for them. One can never hope to keep one's mind within without renunciation. So also, living in a community of like-minded people is necessary—particularly where there are seniors who know the obstacles in spiritual life and can guide the others.

Most people who turn to spiritual life either soon give up their practices entirely or remain merely floating on the surface, but monastics cannot give up. Serving others in a spirit of worship, however, keeps them steady and helps them move forward. Then, as the layers of the onion start peeling off, the monastic eventually finds that his inner quest continues automatically even while he is working because his love and longing for God, or his

Monks of Orthodox Christian Tradition

ideal, have become spontaneous. At the same time, his ability to see and love God in others increases. According to the Russian Orthodox saint Staretz Silouan, 'The man who loves God is able to keep Him in mind day and night since no form of activity interferes with loving God.'[3] This is called constant remembrance of God, and this is what Brother Lawrence perfected.

Yet, over and above renunciation and the cultivation of inwardness of mind and constant remembrance of God, the monastic must also train himself in three other qualities — and these three things he, in turn, gives to the world. It is in these three qualities that we find the special relevance of monasticism in today's world.

The first of these is humility. This does not mean the self-disparaging type of humility. This means, as Swami Premananda once

---

1. However, it is also true that the spiritual practices of these great souls smooth out the spiritual path and remove obstacles for those following them. That is why they are considered saviours.
2. *A Guide to Spiritual Life: Spiritual Teachings of Swami Brahmananda,* trans. Swami Chetanananda (St Louis: Vedanta Society of St Louis, 1988), p. 49.
3. Archimandrite Sofrony, *The Undistorted Image—Staretz Silouan: 1866-1938,* trans. Rosemary Edwards (London: The Faith Press, 1958), p. 170.

A Muslim Fakir

put it, being a 'nobody'. Humility, in fact, is not something to be put on, but rather it is the natural outcome of a monastic life. Being a 'nobody' means being nothing—neither a parent, nor a spouse, nor a wealthy person, nor an important person—being nothing in this world as well as in the next. It is also the natural outcome of serving others in the spirit of serving God. As Sri Ramakrishna once said: 'Who, then, is a devotee? He whose mind dwells on God. But this is not possible as long as one has egotism and vanity. The water of God's grace cannot collect on the high mound of egotism. It runs down. I am a mere machine.'[4] Ramakrishna's comparison of God's grace to water is particularly significant when we understand that water is the symbol of life. Just as to be deprived of water is death, so also, to cut oneself off from God's grace through egotism is death to a monastic.

One of the developments of the modern world is careerism, and along with it the desire for recognition. This, to a certain extent, has begun to affect monasticism also. Young people enquiring about monastic life are beginning to ask what the career opportunities are in it. Monastics, in fact, have the greatest of all career opportunities: the opportunity to realize God, or to attain nirvana —whatever one may call it. To ask for anything else is against the spirit of monastic life and of the self-surrender that monastic life requires. However, this is not to say that disparities in opportunities should remain, such as those between monks and nuns in most religious orders. All should have the opportunity to grow. One of the greatest events in the history of monasticism happened in 1954 when Sri Sarada Math was inaugurated as the first monastic order run exclusively by and for women. Its success is a great tribute to women monastics. If this starts a trend—and it probably will—women monastics will no longer be in danger of being held back in their spiritual growth by lack of educational opportunities.

A Jewish Rabbi

So if monastics are nobodies and have nothing, what could they possibly give to the world? Being a 'nobody' and having nothing makes one solely dependent on God, and this gives one peace, strength, and fearlessness, which can be shared with others. As Swami Brahmananda said, 'Knowing him, if you perform action, you will not only find peace in yourself but will be able to share it with others.'[5] Staretz Silouan's sole desire was to attain the humility of Christ. In his praise of the 'humble soul', he wrote, 'Thou burnest bright like the sun, and thou art not consumed but with thy warmth thou givest warmth unto all.'[6] This does not mean, however, that a humble person is weak or timid. On the contrary, according to Swami Vivekananda, one who has nothing but God has the power of God behind him. Once he wrote

A Tibetan Monk

4. *The Gospel of Sri Ramakrishna*, trans. Swami Nikhilananda (Madras: Ramakrishna Math, 1986), p. 111.
5. *A Guide to Spiritual Life*, p. 70.
6. *The Undistorted Image*, pp. 177-8.

Swami Vivekananda

Swami Brahmananda

to his brother disciples: 'Have faith in yourself—all power is in you—be conscious and bring it out. ... To work, with undaunted energy! What fear! Who is powerful enough to thwart you! ... We shall crush the stars to atoms, and unhinge the universe. Don't you know who we are? We are the servants of Sri Ramakrishna.'[7] Swami Brahmananda also said: 'Brahmacharya generates tremendous power. A true brahmacharin can do the work of twenty-five men.'[8]

The second quality that a monastic should cultivate is *medhā*, or intelligence. *Medhā* is cultivated partly through study of the scriptures, but also through meditation and other spiritual disciplines. Through *medhā* one is able to grasp subtle spiritual truths and also keep one's concentration and will fixed and steady. As Swami Brahmananda said: 'A brahmacharin does not waste his energy. He may not look like a wrestler, but day by day the power of his brain increases so much that he can easily grasp the transcendental truths. ... The Master [Sri Ramakrishna] used to say, "Brahmacharya increases the power of the mind." ... When your life is established in brahmacharya, you will see the manifestation of the Divine in everything. By observing brahmacharya one accumulates *ojas* [spiritual energy] in the brain.'[9]

This does not mean that all monastics become scholars, though the tendency is there and many do. But, more important, monastics develop a power of concentration and understanding with which they can get to the root of problems—both spiritual and secular—and find the best solutions. This belies the objection always raised that monastics cannot counsel householders. Moreover, because of their power of *medhā* and other qualities, monastics have a special calling as educators. This is why Swami Vivekananda envisioned monastics coming more and more into the educational field. This trend has already started, and most likely it will grow during the 21st century. However, in monastic orders where the education of nuns has been neglected, the nuns themselves need to be given more educational opportunities. Things have begun to move in this direction, but much still remains to be done.

The third and most important quality that a monastic develops is love. We don't need to read the newspapers to understand there is a tremendous problem today due to violent tendencies and lack of love and empathy. We can see it all around us. People are crying for love, and yet they will not give it to others. Swami Vivekananda said in one place that non-violence and love for all are to be practised by everyone, whether monastic or lay. But monastics must be the exemplars. In fact, monastics must train themselves to cherish others just as selfish people cherish themselves. And they have to be particularly careful about those closest to them—ie, monks with their brothers and nuns with their sisters. According to the Dalai Lama: 'Very often we say "May all sentient beings be happy, and may I work for the benefit of all limited beings", and we think of these sentient beings as very distant from us. However, the people you should really apply your energies to are the people you have daily contact with including your neighbours and those whom you find to be a nuisance.'[10] Where there is love and em-

---

7. *The Complete Works of Swami Vivekananda* (Calcutta: Advaita Ashram, 1989), Vol. 6, pp. 274-5.
8. *A Guide to Spiritual Life*, p. 128. Brahmacharya includes the practice of celibacy, truthfulness, study of the scriptures, spiritual disciplines, and service to others.
9. Ibid., pp. 92, 117, 145.
10. *Cho Yang: The Voice of Tibetan Religion and Culture*, Spring 1986, Vol. 1, No. 1, p. 95.

Sri Chaitanya

pathy among the monastics, that community grows.

According to Staretz Silouan: 'The word *love* is the very name of God, and its true sense is only revealed by the action of God Himself ... Whoever has experienced the deep and intense suffering of the human spirit when excluded from the light of true being, and, on the other hand, knows what it is to be in God, has no doubt that every human being is a permanent eternal value, more precious than all the rest of the world.'[11] Monastics, therefore, have a special ability to empathize with others.

Love is a natural expression of an inner life filled with the bliss of God. In fact, a true holy person cannot have anything but love. Probably the best example of this is Swami Brahmananda's story of the holy man and the scorpion: Once a holy man was sitting on the bank of a river when he noticed a scorpion struggling in the water. Out of compassion he took it out of the water and put it on the ground near by. In the process, however, the scorpion stung him, causing great pain. Shortly afterwards the scorpion again fell in the river, and again the holy man was stung while pulling it out. When this happened a third time, a man sitting near by asked, 'Why are you saving that scorpion when it continues to sting you?' The holy man replied: 'It is a scorpion. Its nature is to sting. But the nature of a holy man is to do good to all. The scorpion will not give up his nature, so why should I?'[12]

So monastics have much to offer this world, but still there is more they will have to do—especially in this coming century. The 21st century, it seems, is going to be crucial in the history of humanity, for if human beings cannot learn very soon to live in peace, they will destroy themselves. And since much of the trouble in the world that is happening now involves religion, monastics are going to have to step in to put a stop to it. It is up to the monastics of all religions, as well as other religious leaders, to hold up the highest ideals of spirituality to their respective communities and refuse to allow religion to be used for wars and dissensions.

In October 1996 over 400 representatives of different religions (Christians, Jews, Muslims, Buddhists, Hindus, Shintos, and others) met in Rome to mark the tenth anniversary of the Assisi meeting of Pope John Paul II with the leaders of world religions. The theme of the conference was 'Peace is the Name of God.' The conference ended with an appeal to the whole world: 'There is no such thing as a holy war. Only peace is holy. Peace is the name of God. May religions never be a pretext for hate!'[13] Conferences such as this are without doubt extremely helpful, but more important, their message must reach the grassroots level. Monastics and religious leaders of all faiths must earnestly strive to see that this happens.

---

11. *The Undistorted Image*, pp. 60-1.

12. *A Guide to Spiritual Life*, p. 104 (adapted).

13. *Bulletin of Monastic Interreligious Dialogue*, No. 57, Winter 1997, p. 2.

Astrology: The Science of the New Millennium

GAYATRI DEVI VASUDEV

Smt Gayatri Devi Vasudev is Editor, The Astrological Magazine*—the world's foremost journal on astrology—and Vice-President, Indian Council of Astrological Sciences. She is the daughter of the illustrious crusader for astrology, Dr B.V. Raman. After a brilliant academic career, Smt Vasudev began assisting her father, and has travelled extensively, lecturing on astrology at important international platforms. She is the first lady to deliver the keynote address at the Third International Symposium on Vedic Astrology at San Rafael, California, USA. She has written and edited many books, and was awarded, among others, the Lifetime Achievement Award at California. She is one of IBC's 2000 Outstanding People of the 20th Century. In this inspiring article, Smt Vasudev presents astrology as the science of the future.*

We have just stepped into the new millennium. The 21st century is based on the Gregorian calendar which, though prevalent throughout the world, has little to do with scientific calendaring, based as it is on the caprice of egoistic Roman emperors—Julius and then Augustus Caesar—and later adjusted by the Church (Pope Gregory) in medieval Europe. On the other hand, we in India have a great tradition of calendar-keeping, developed on purely astronomical and, therefore, scientific factors, and which is universally applicable. It is a pity that in our country which has a wonderful heritage of science (obsession is quite different from a healthy interest) something as important as calendar science should be based on non-science factors of a trifling nature, and that too, from medieval Europe. Be that as it may, under the Indian system, we have stepped into the lunar year Vikrama in April 2000, and will step into the lunar new year Viśu in March 2001. Viśu incidentally marks the beginning of the fourth year of the 52nd century of Kali, which began in 3102 BC. This date, please note, marks the year when Lord Krishna gave up his physical body.

Kali Yuga is a time cycle, not mythological as disdainfully dismissed by our so-called secular intellectuals who are but poor excuses for western clones, but the last part of the 4-part cycle or Mahā Yuga comprising of Satya, Tretā, Dvāpara and Kali Yugas. This major time-cycle is defined by ancient Indian astronomers as starting from the point of mean conjunction of the planets at the first point of Aries at a place near Sri Lanka and ending with the same planetary phenomenon when it occurs again after 4,320,000 years. Such large expanses of time were known to the Indians alone. The noted astronomer Carl Sagan paid rich tribute to the ancient Indian intellect when he said that while western science has not been able to conceive of time periods beyond a few thousand years, **it was only the Hindus of Vedic India who had a thorough and scientific conception of immense time-cycles like the Yugas, Mahā Yugas, Manvantaras, Kalpas, etc—stretching to millions of years, and the most minutest units of time known as *krati*, which is equal to one part of the 3400th of the second.**

This science of time and space goes under the name of Jyotiṣa and is the discovery of the ancient Indian thinkers.

Jyotiṣa has been a 'happening event' of the last 100 years. A far-reaching event of the 20th century was Dr Raman's crusade for astrology with its origins in our country but inundating western shores and engaging the

attention of serious thinkers there. Dr Raman not only took astrology to the West, he revived and rejuvenated the science in the country of its origin, creating new respect for it amongst the intelligentsia. This wave of interest in Jyotiṣa generated in the West is bound to gain greater momentum in the new millennium and will come back to us again probably with western certification, when our own intellectuals will hail it as the science of the new millennium. The 21st century will undoubtedly be the century of India, the century of astrology and the century of the great philosophical systems of Vedic India.

Most Ancient Civilization

India, as the home of the most ancient civilization, has contributed not a little to the history of scientific thought and techniques. Most scholars, when they think of the genius of the Vedic Hindu, are naturally more attracted to their noble religion, sublime philosophy and the most varied character of her rich literature and charming devotional poetry. The Vedic Hindu, in his great quest of the *parā-vidyā* made much progress in the *aparā-vidyā* or the so-called inferior knowledge of relative truths—positive sciences included—with a completeness which is unparalleled in antiquity.

As Old as the Vedas

Astrology is one of the oldest sciences the world has ever known. It is a *vedāṅga* or a limb of the Vedas and a study of it was a must before taking up the study of the Vedas. The Vedas comprise knowledge leading to the supreme realization. The *vedāṅgas* are six in number—Jyotiṣa or astrology-cum-astronomy, Kalpa or the procedure to be followed in sacrificial rituals, Nirukta or the principles of intonations and meaning of the Vedas, Śikṣā or phonetics, Vyākaraṇa or Vedic grammar, and Chandas or metre. It was imperative in ancient days to be thorough in these six disciplines if one were to take up the study of the Vedas. In other words, Jyotiṣa is as old as the Vedas themselves.

The Vedas are said to be *apauruṣeya* or revealed. In fact, scholars date Vedāṅga Jyotiṣa as early as between 7000 to 5000 BC. Astrology was always an integral part of the ancient social life in Vedic India.

References in Epics

References to astrological phenomena occur in the great epics of India. The *Rāmāyaṇa* and *Mahābhārata* prove not only the antiquity of Hindu astrology but also show how widely it pervaded all spheres of life even in those days. In the *Rāmāyaṇa* (18.7-10), Vālmīki says, describing Rama's birth: 'Then during the 12th month, on the 9th *tithi* of *śukla pakṣa* in the Punarvasu Nakṣatra and Karkāṭaka Lagna, Kausalyā gave birth to Jagannātha Śrī Rāma. ... At that time five planets were in their exaltation and in the ascendent was posited Jupiter with the moon.'

In the *Mahābhārata*, the great war was anticipated by Veda Vyāsa, Lord Kṛṣṇa, Vidura, Bhiṣma and others much before its actual occurrence on the basis of planetary phenomena. Vyāsa, when he meets King Dhṛtarāṣṭra before the war, speaks of the impending fortnight of 13 days as unusual and indicative of great slaughter and killing. Two eclipses falling within a 13-day fortnight are feared as filled with ominous portents. All this shows astrology was an integral part of social life even during the *Rāmāyaṇa* period which is much anterior to the *Mahābhārata*. An astrologer was expected to have certain basic qualifications:

Aneka-hora-tattvajñaḥ
pañca-siddhānta-kovidaḥ;
Ūhāpoha-paṭuḥ siddhaḥ
mantro jānāti jātakam.

An astrologer should be an adept in the different *horas* and five *siddhāntas*, must be endowed with inferential ability or power of deduction, and must be a *siddha* in mantra.

Three Sections

In a broad sense, astrology can be divided into three *skandhas*: *gaṇita*, *saṁhitā*, and *hora*. **Gaṇita** is astronomy and mathematics, also going under the name of *siddhānta*. There are as many as 18 *siddhāntas*. Varāhamihira con-

sidered only five, viz, Pauṣa, Romaka, Vaśiṣṭha, Saura and Paitāmaha, but felt that *Sūrya Siddhānta* was the most perfect. His *Pañca Siddhāntikā* deals with all the five *Siddhāntas*.

Saṁhitās like the *Bṛhat Saṁhitā* and *Garga Saṁhitā* deal with diverse natural phenomena and planetary motions. The movements of the Sun and other planets and their connections with earthquakes, floods, tempests, weather changes, rainfall, war, political developments, crops, economic cycles, and mass-related phenomena like mass-migrations, famines, epidemics, etc, all come under *Saṁhitās*.

The third *skandha* is ***Hora*** or predictive or *phalita* Jyotiṣa, and is mainly Pārāśarī—the system founded by Sage Parāśara.

Pārāśarī Astrology

Parāśara dates prior to the *Mahābhārata* period which is at least 5000 years old. The *Bṛhat Parāśara Hora* is the magnum opus of astrologers. This treatise also deals with Jaimini. The Tājaka system is not found in Pārāśarī, and must have been a system developed later, and bears signs of Arabic influence. Some sections of astrology may be said to have been carried to the Arab countries and again re-routed to India in a slightly varied garb.

The backbone of Pārāśarī astrology is the *rāśi* chart, read against the backdrop of the Daśa system. There are about as many as 42 Daśa systems to be applied under different conditions. But it is the Viṁśottarī time-scale of 120 years that has been the most popular as also the most reliable one in deciphering events and occurrences. In fact, the Viṁśottarī Daśa system is endorsed by Parāśara himself as especially suited for the Kali Yuga, where the optimum span of human life is 120 years. The Viṁśottarī Daśa system is based on the Nakṣatra occupied by the moon at birth. The moon, though of the solar system, is yet exclusive to the earth and of great importance to earthlings. Results are drawn on the basis of planetary rulership.

Jyotiṣa is not confined to the solar system alone, although it begins with it. The Hindu fixed-Zodiac system is the sidereal Zodiac and star-based. The planets are spread along the Zodiac of 27 constellations. They are also influenced by the constellations they occupy. That means these stars or star-systems which are actually sun-systems (or beyond the solar system) have a role in the scheme of astrology.

The nine planets or *grahas* and the 27 constellations together with the 12 signs form the tools of the astrologer.

Jaimini Astrology

In Jaimini, the aspects are reckoned differently. There are different Daśa systems but they are sign-oriented. Depending upon the rising sign at birth, the order and extent of Daśas such as *cara, trikoṇa* and other Daśas are determined. Kārakas take precedence over lordships. Kārakas are natural signifiers. For example, depending upon the longitude of planets sign-wise, we have the *ātma-kāraka*, the chief or prime planet, which is all-important in Jaimini astrology. In Parāśara, the Kārakas are fixed and are the same for all charts. In Jaimini, the *kārakattva* is determined on the basis of the longitude of a planet with reference to the beginning of the sign. The Kārakas differ for different charts in Jaimini.

The Kārakas in Jaimini are: (a) the *ātma-kāraka* (prime ruler) or the planet with the highest longitude with reference to the starting of that sign; (b) the *amātya-kāraka* (secondary ruler) or the planet with the next highest longitude in sign of occupation, who comes next in importance to *ātma-kāraka*; (c) the others, *bhrātṛ-kāraka, mātṛ-kāraka, putra-kāraka, jñāti-kāraka,* and *dārā-kāraka,* follow in this order. In Jaimini, the emphasis is on the *navāṁśa* chart.

Tājaka Astrology

The Tājaka system has essentially to do with annual results, and some of the aspects here are quite different from the Pārāśarī aspects. They are more or less similar to the characteristics of western astrology. A unique feature of Pārāśarī astrology is what are called *yogas. Yoga* means union or combination, but

here it is taken to mean combinations and permutations of different planets. Sometimes *yoga* spills over to the *navāṁśa* chart also. All *yogas* can broadly be divided into *yogas* and *aristas*. *Yogas* are fortunate combinations—for success, prosperity, health, fame, etc—while *aristas* cover misfortunes like deaths, tragedies, ill-health, etc. *Yogas* in turn, in the sense of beneficial *yogas*, can be *rāja yogas* (political power, pomp, pelf), *dhana yogas* (combinations for wealth), or *jñāna yogas* (*yogas* for knowledge and spirituality). There are other kinds of *yogas* also, attributed with specific results.

Law of Karma and Rebirth Theory

Astrology or Jyotiṣa is the science of Light. It sheds light on all aspects of life:

Yadupārjitam-anya-janmani śubha-
aśubhaṁ tasya karmaṇaḥ patim;
Vyñjayati śāstrametat-
tamasi dravyāṇi dīpa iva.

'Just as a lamp illumines objects in darkness, astrology reveals to us the effect of our previous karma, good or bad.'

The entire edifice of astrology is built on the theory of rebirth and the law of karma. Why is one born a prince and another a pauper? Why is one born in an affluent cultured family with opportunities handed to one on a platter, while the child of a jail-bird is born with damning limitations? How can such inequalities occur in a universe that is otherwise outwardly and obviously so precise, so orderly and so beautiful? The planets move in their orbits with mathematical precision; the Sun and moon bring in day and night; the seasons follow in order for earthlings. When so much order is seen in the so-called inanimate celestial bodies, would it not be unreasonable to say that there is no order in God's most perfect creature—man—and his life? Can we say it is accident or chance that gives birth to the diversities in human life around us? Such a charge would not stand against the strong overwhelming orderliness of the rest of the cosmos of which the earth is only an infinitely tiny part. The apparent diversities we see around us are as much a part of the order as that which prevails in the rest of God's creation.

According to Indian philosophy, when a person dies he sheds his bodily garment. The *jīva* or soul, at the time we call death, is said to take with it all its limiting adjuncts of *avidyā* or ignorance—its good and bad deeds done at the physical, mental, moral, spiritual levels of existence—its likes and dislikes, its hates and loves, and its entire personality with it. This bundle of consciousness stays in a state of hibernation until the time comes for it to enter the physical plane of existence again; until the planetary pattern is such as to allow it to work out its karmic debts, its evolution in its journey towards perfection.

Astrology is the study of the planetary pattern at birth, and its results are consistent with the karma at the individual's disposal which is scheduled to operate in this birth.

The theory of karma is very interesting and equally complicated. Broadly speaking, it is of three kinds—*sañcita* (the stored-up effects of actions), *prārabdha* (that which has begun to produce effect), and *āgāmi* (that karma which is yet to be performed). *Prārabdha* karma is portrayed in the birth chart in the form of, not events, but tendencies or *vāsanās* (propensities) and *saṁskāras* (those stored-in results of actions which produce birth, life and misery). These are the propelling agents that propel us into specific relationships, situations and activities. Since they are only in the form of tendencies, their quanta and quality can be modified through right effort and faith in God. The *Praśna Mārga* says that all the planets indicate whether we enjoy or suffer as a result of our actions in previous births. In *Phala-dipikā* (22:32), Mantreśvara says: 'This span of life has been declared by wise men with respect to only those who are engaged in the practice of virtuous actions, who keep their senses under control, who eat wholesome diet, who are devoted to the Vedic class and God, and who preserve the character and conduct of their families.' Conversely, the span of life (*āyus*) indicated by the chart can be shortened by

abusing the body, the senses and the mind. The *Jātaka Pārijāta* (5:100) says that when a malefic planet occupies the 8th *bhāva*, the 8th lord occupies the 12th or a *kendra* and the lord of the rising sign is deficient in strength. Death is said to result from the evil effects of pursuing a wicked course of life.

Dṛḍha-adṛḍha

It is not that karma is always absolutely deterministic. There are several categories of karma of varying intensities—even in *prārabdha* karma—like compoundable (*drḍha*) and non-compoundable (*adrḍha*). Depending upon the cause which generates a specific karmic result, it is either alterable or unalterable. *Prārabdha* karma is simply that portion of karma that is set apart for fruition in this birth—the part best suited to help the *jīva* in its spiritual evolution.

The means of generating karma are mainly three—through bodily (*kāyika*), verbal (*vācika*) and mental (*mānasika*) actions. Planets symbolically indicate the language of the penalties and decrees, as also the rewards passed against us for our deeds of omission and commission in previous births or states of existence. If Venus is bad and afflicted by Saturn, Mars or Rāhu with no relief from benefices, the interpretation would be that the karma of the native in his/her pervious births is such as to call for punishment in the direction of a marital partner—either husband or wife. The punishment is not only punitive but also reformative. Depending upon the intensity of the affliction, the intensity of suffering will be determined. **But this is not always absolute and unalterable: it can be averted by timely remedies and this is the position or role of astrology. Depending upon the nature of the affliction, it may be augmented, neutralised, or counteracted according to the strength of mind the native possesses or has developed, and the recourse available to him.**

Talking of mental strength, the Moon rules the mind. A strong Moon invariably endows one with certain positive traits such as optimism, grit, and perseverance. Such natives automatically tend to work harder, fight obstacles and not get bogged down by impediments. But suppose the Moon is *nīca* or is in debility. Then such a native has certain inherent drawbacks—moodiness, self-pity, diffidence, etc, and he has to overcome these traits if he wants to succeed. But if the same Moon gets *nīcabhaṅga* or cancellation of debility, the natives, though initially endowed with the negative traits, learn in the face of circumstances to overcome them and forge ahead to become extraordinary achievers. Many times, great souls like the illumined ones have the moon debilitated, but with effort, they cancel this debility. They are the best examples of what effort can do to conquer and overcome the adverse indications in the chart.

The very fact that there is a branch called *muhūrta* or election-astrology bears ample testimony to the indicative nature of astrology. A *muhūrta* is a time-segment rendered powerful by the planetary positions at that time in such a manner as to aid the success of a venture or project begun then. There are *muhūrtas* for good works such as marriages, opening of business establishments or industries, housewarming, surgery, etc, and there are *muhūrtas* to aid destructive activity also, such as war, arson, demolition of buildings, deforestation, etc.

The *muhūrta* idea would have been redundant if karmic factors were all-powerful and human effort had no role to play at all. One has to keep trying to augment the good tendencies and to weaken and discourage the bad tendencies. Effort and prayer to God must go hand in hand. One can never say when effort will overcome the indication and so we have to keep trying. When we pray to God we are directed towards right effort. **Fate cannot be absolute. In a world of relativity such as light and darkness, hate and love, happiness and unhappiness, it has to be fate and also free-will and one cannot exist without the other.**

Scope of Astrology

Although astrology is one of the oldest

sciences the world has known, in terms of explored potential it is still very much in its infancy. Astrology is of tremendous import in forecasting weather and natural calamities—not days or weeks ahead, but months and even years in advance. For this what is required is a team of competent astrologers. Each team must be assigned one geographical area. This team can draw charts for major transits, eclipses, and new- and full-moon details, and predict the possibility of natural disaster striking that area. Whether it is an earthquake, a cyclone, hurricane winds, torrential rains, volcanoes, dry spells of drought or famine, advance knowledge is invaluable in taking protective measures.

The usual criticism about astrology is: **What is the use of knowing our future? Astrology is not just knowing our future: it is planning our future.** Astrological indications are not deterministic. By suitable effort, the adverse trends can be overcome. How do we do that? I am purposely using the term 'trends'. That is how Dr Raman, who has given people a right understanding of astrology during the last century, always emphasised its role. As Mantreśvara, an authority of the 16th century, says, we must remember that it is within our power to harness the planetary influences to produce favourable results to ourselves and to the country. He says:

Ahiṁsakasya dāntasya
dharmārjita dhanasya ca;
Sarvadā niyamasthasya
sadā sānugrahā grahāḥ.

'To one who causes no harm to others, to one who is restrained in behaviour and conduct, to one who earns wealth through righteous means [this appears to be the most flaunted moral law today and that could also explain the sorry state of the modern world] and to one whose conduct is regulated by fairness and principles of natural justice, favourable results always accrue.' Therefore it is within our own power to attract good results at all levels—individual as well as collective.

The Future of Astrology

There is virtually no field in which astrology cannot work. The list of areas where astrology gives insights, which no other discipline can do, is endless. Agriculture, public health, social problems, children, marital counselling, elections, addictions, business, crime detection, accidents, female problems—the list goes on. It has been proved times without number that most astrological predictions have come true; failures only show the deficiency of the calculators. It may interest readers that *The Astrological Magazine* has predicted a number of national and international events over the years correctly, such as Indira Gandhi's assassination, the election of George Bush, the recent Kargil war, the fire at the Bharatpur arms depot, violence in Sri Lanka, etc. It all goes to show that astrology, under competent and trained hands, could be a powerful tool to avoid at least some disasters and calamities.

Astrology as a regular science has been presented before the West in particular and the world in general by Dr Raman, who may be rightly called the father of modern astrology. What I propose is that the negative ideas about any science for that matter should be given up and the true scientific spirit of observing everything objectively, without bias, should be cultivated. ❑

Prophecy About a Prophet!

A Mohammedan gentleman once told Swami Vivekananda at Naini Tal: 'Swamiji, if in aftertimes any claim you as an Avatar, remember that I, a Mohammedan, am the first!'

—*The Complete Works of Sister Nivedita*

Philosophy for the Future

PHILOSOPHERS

A few of the world's luminaries in the field of philosophy tell us about the need of continuing the study of philosophy for our own survival.

One day I was very thirsty and I wanted to have a drink at one of these lakes; but when I approached that lake it vanished. Immediately with a blow came into my brain that idea that this was a mirage about which I read all my life; and then I remembered and smiled at my folly, that for the last month all the beautiful landscapes and lakes I had been seeing were this mirage, but I could not distinguish them then. The next morning I again began my march; there was the lake and the landscape, but with it immediately came the idea, "This is a mirage." Once known it has lost its power of illusion. So this illusion of the universe will break one day. The whole of this will vanish, melt away. This is realisation.

Philosophy is no joke or talk. It has to be realised; this body will vanish, this earth and everything will vanish, this idea that I am the body or mind will for some time vanish, or if the Karma is ended it will disappear, never to come back. ... It is very hard to come to Jnana. It is for the bravest and most daring, who dare to smash all idols, not only intellectual, but in the senses.

—Swami Vivekananda

After experience had taught me that all things which frequently take place in ordinary life are vain and futile, and when I saw that all the things I feared, and which feared me, had nothing good or bad in them save in so far as the mind was affected by them; I determined at last to inquire whether there was anything which might be truly good, and able to communicate its goodness, and by which the mind might be affected to the exclusion of all other things; I determined, I say, to inquire whether I might discover and attain the faculty of enjoying throughout eternity continual supreme happiness. ... I could see the many advantages acquired from honour and riches, and that I should be debarred from acquiring these things if I wished seriously to investigate a new matter. ... But the more one possesses either of them, the more the pleasure is increased, and the more is one in consequence encouraged to increase them; whereas if at any time our hope is frustrated, there arises in us the deepest pain. Fame has also this great drawback, that if we pursue it we must direct our lives in such a way as to please the fancy of men, avoiding what they dislike and seeking what pleases them. ... But the love towards a thing eternal and infinite alone feeds the mind with a pleasure secure from all pain. ... The greatest good is the knowledge of the union which the mind has with the whole of nature. ... The more the mind knows, the better it understands its forces and the order of nature; the more it understands its forces or strength, the better it will be able to direct itself and lay down the rules for itself; and the more it understands the order of nature, the more easily it will be able to liberate itself from useless things; this is the whole method.

—Spinoza

No time can be more unfavourable to philosophy than that in which it is shamefully misused on the one hand to further political objects, on the other as a means of livelihood. ... But I will never believe that even the simplest chemical combination will ever admit of mechanical explanation; much less the properties of light, heat and electricity. These will always require a dynamical explanation. ... However much we may investigate, we can

never reach anything but images and names. We are like a man who goes round a castle seeking in vain for an entrance, and sometimes sketching the façades.

—*Schopenhauer*

To be a philosopher is not merely to have subtle thoughts, nor even to found a school, but so to love wisdom as to live, according to its dictates, a life of simplicity, independence, magnanimity, and trust.

—*Henry David Thoreau*

Knowledge of the lowest kind is un-unified knowledge; science is partially-unified knowledge; philosophy is completely-unified knowledge.

—*Herbert Spencer*

The history of philosophy in its true meaning deals not with the past, but with the eternal and veritable present; and in its results resembles, not a museum of aberrations of the human intellect, but a pantheon of Godlike figures representing various stages of the immanent logic of all human thought.

—*Hegel*

What serious-minded men not engaged in the professional business of philosophy most want to know is what modifications and abandonments of intellectual inheritance are required by the newer industrial, political, and scientific movements. ... The task of future philosophy is to clarify men's ideas as to the social and moral strifes of their own day. Its aim is to become, so far as is humanly possible, an organ for dealing with these conflicts.

—*John Dewey*

There is a pleasure in philosophy, and a lure even in the mirages of metaphysics, which every student feels until the coarse necessities of physical existence drag him from the heights of thought into the mart of economic strife and gain. ... Truth will not make us rich, but it will make us free.

Some ungentle reader will check us here by informing us that philosophy is as useless as chess, as obscure as ignorance, and as stagnant as content. 'There is nothing so absurd,' said Cicero, 'but that it may be found in the books of the philosophers.' Doubtless some philosophers have had all sorts of wisdom except common sense; and many a philosophic flight has been due to the elevating power of thin air. ... But is philosophy stagnant? Science seems always to advance, while philosophy seems always to lose ground. Yet this is only because philosophy accepts the hard and hazardous task of dealing with problems not yet open to the methods of science—problems like good and evil, beauty and ugliness, order and freedom, life and death; so soon as a field of inquiry yields knowledge susceptible of exact formulation it is called science. Every science begins as philosophy and ends as art; it arises in hypothesis and flows into achievement. ... Science without philosophy, facts without perspective and valuation, cannot save us from havoc and despair. Science gives us knowledge, but only philosophy can give us wisdom.

—*Will Durant*

It is not merely as a piece of antiquarian investigation that Indian thought deserves study. Speculations of particular thinkers or the ideas of a past age are not without value. Nothing that has ever interested men and women can ever wholly lose its vitality. ... It is easy to make sport of philosophy, since to those who are content to live among the things of sense and think in a slovenly way, philosophic problems wear a look of unreality, and possess a flavour of absurdity. The hostile critic looks upon the disputes of philosophy as wasteful logic-chopping and intellectual legerdemain concerned with such conundrums as 'Did the hen come first or the egg?' The problems discussed in Indian philosophy have perplexed men from the beginning of time, though they have never been solved to the satisfaction of all. ... To the Indian student a study of Indian philosophy alone can give a right perspective about the past of India.

—*S. Radhakrishnan*

Art for the Future

RITENDRA ROY

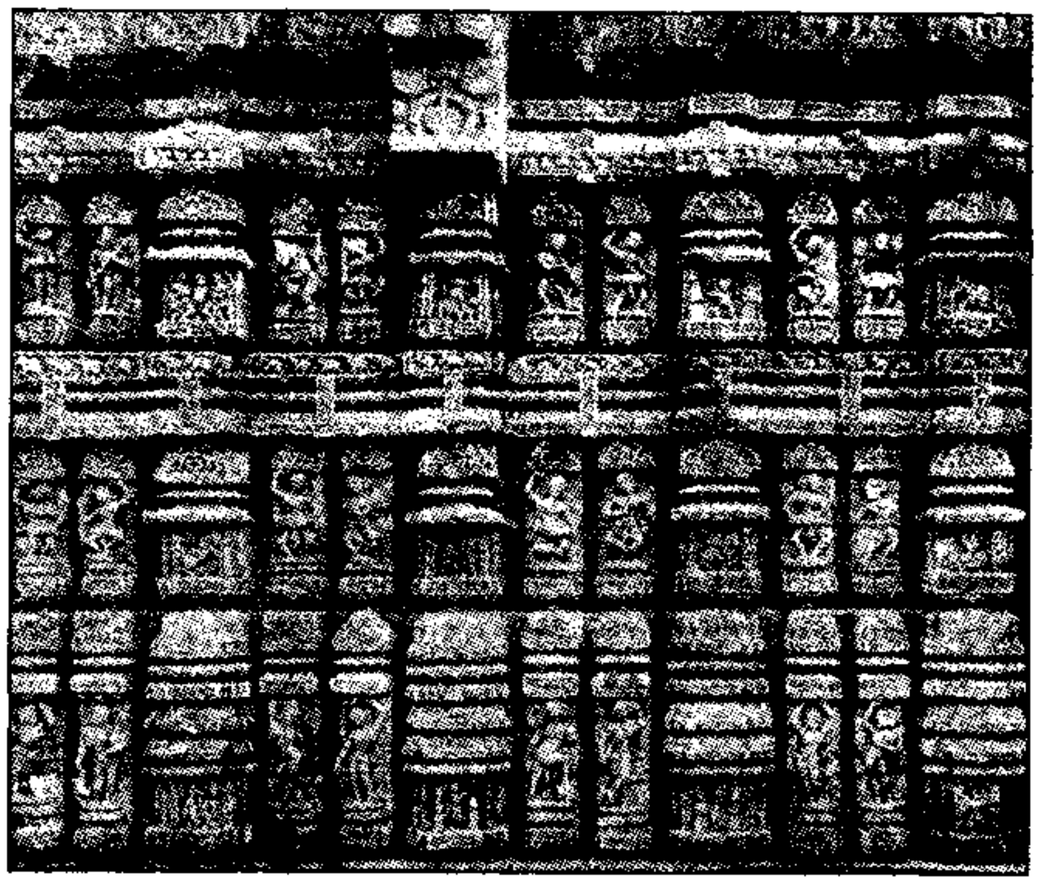
Sri Ritendra Roy is a young artist from Calcutta who has studied at the Rabindra Bharati University and Kala Bhavan, Santiniketan. Sri Roy is a strong propounder of the idea that art will survive in spite of technology. He wants artists to bring about a positive change in the present sad state of art, which has been sidelined owing to the advent of modern technology. Here are his absorbing ideas about how to accomplish it. Prabuddha Bharata *also pays homage to Indian art by way of publishing a few pictures out of the millions of excellent works of Indian art, most of which were vandalised or lost in the flow of time.*

Creation is an intrinsic part of life.

Buddhist Art: Avalokiteshwara Buddha

Through various paths of discovery, living beings have expressed different facts of life: the origination of the earth and the birth of the human being are their supreme manifestations. The ancient Vedic tradition understood the world to be a structural formation of the five elements—earth, water, fire, air and ethereal space. In the course of the long history, man has controlled and interplayed with all the natural elements. On the one hand, while he has appreciated the splendour of nature, on the other he has also produced his own models of creation, guided by the spirit of 'progression'. This spirit of 'moving on' has resulted in manifold artistic expressions.

From the ancient age to the present day, art has undergone numerous phase-wise changes to set new standards of accomplishment. The remains of the ancient civilizations like the Mesopotamian, the Egyptian, the Indus Valley, and the Greek give us ample records of a flourishing life and culture which influenced the make-up of the succeeding generations. Art activity prospered right down the ages, finding expression in glorious examples like the painted Bison in the prehistoric cave near Altamira, the Stonehenge in England, the Pyramids of Egypt, the drawings on the rock surface of the caves at Bhimbetka in Madhya Pradesh, the paintings within the caves at Ajanta, the rock-cut temples at Ellora, or the painted ceiling of the Sistine chapel at Rome. As the human brain absorbs new visual inputs and concepts, it has also transformed the panorama of art in outline and population. In this process, there has always been a continuity of the art of the past with that of the



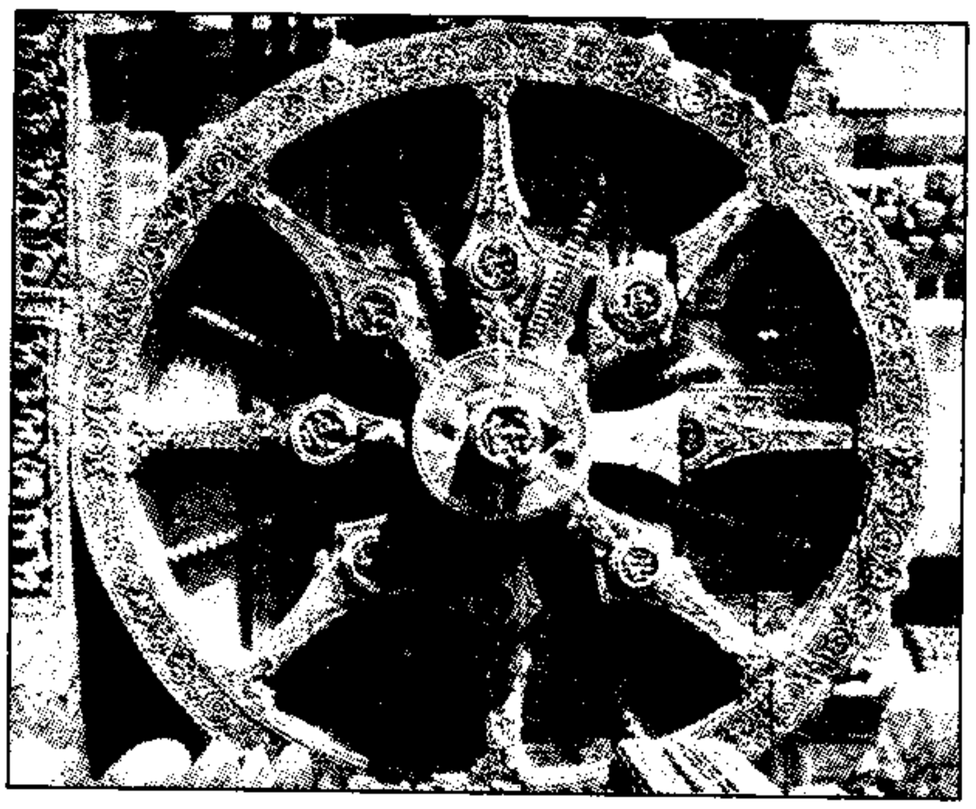
Wall or Wallpaper? Konark Art

present. And, so it will be in the future. This truth finds a suitable expression in the words of the great American poet and critic, T.S. Eliot:

> What happens when a new work of art is created is something that happens simultaneously to all works of art which precede it. The existing monuments form an ideal order among themselves, which is modified by the introduction of the new work of art among them. ... Whoever has approved this idea of order...will not find it preposterous that the past should be altered by the present as much as the present is directed by the past [see T.S. Eliot, 'Tradition and the Individual Talent' in *Selected Essays 1917-1932* (New York, 1932), p. 5].

During the 19th century, the Industrial Revolution brought about far-reaching changes in the world of art. It altered the set mode of social life. While it questioned the role of the artist in relation to his creations, it also brought about a new and flourishing art market, controlled by an emerging class of rich people and industrialists. The invention of photography in 1839 was the first step which introduced the experimental spirit concerning the identity and reality of the image or object in art. A revolutionary change occurred, which saw the emergence of a group of artists called the 'Impressionists'. The era of modern art had arrived. The 20th century saw radical changes taking place. Various artists associated with different movements in modern art initiated new insights.

Today the technology-driven world has devised new methods and materials based on industrial techniques, ranging from plastic to concrete and other products. Thus many artists are working in 'multimedia', taking whatever materials suit their purpose of work. In the present situation we have developed video art, computer-generated art and holographic art (a technique of using light waves to record an image of a three-dimensional object on a two-dimensional photo-sensitive plate). The art of 'installation' is also another means where different media and materials are brought together to create a construction within a given space, incorporating the space itself. This is mainly sight-specific in conception, and is dismantled after the artist has publicly exhibited it in some gallery or an open space. Its impermanence or dismantling might be in tune with the changing scenario where traditional boundaries are also being erased. The potentiality of the computer in manipulating vision and creating 'virtual' spaces (or 'virtual reality' through the 'parallax vision') is one of the most exciting challenges the artist has ever faced. With this aid many movies have been made. People are quickly learning to live with this type of artificial reality. This virtual art form is actually based on an information-transaction meta-medium. So by entering the global Net, the communication and interaction of the intellect will increase—creating much more consciousness among artists.



Konark Art: Chariot Wheel

Gandhara Art

With the enhanced graphic tools in our hand, our way of looking at things is fast changing. The click of a mouse is narrowing the gap between boundaries, and our canvas is becoming far wider—enlarging the scope of absorption.

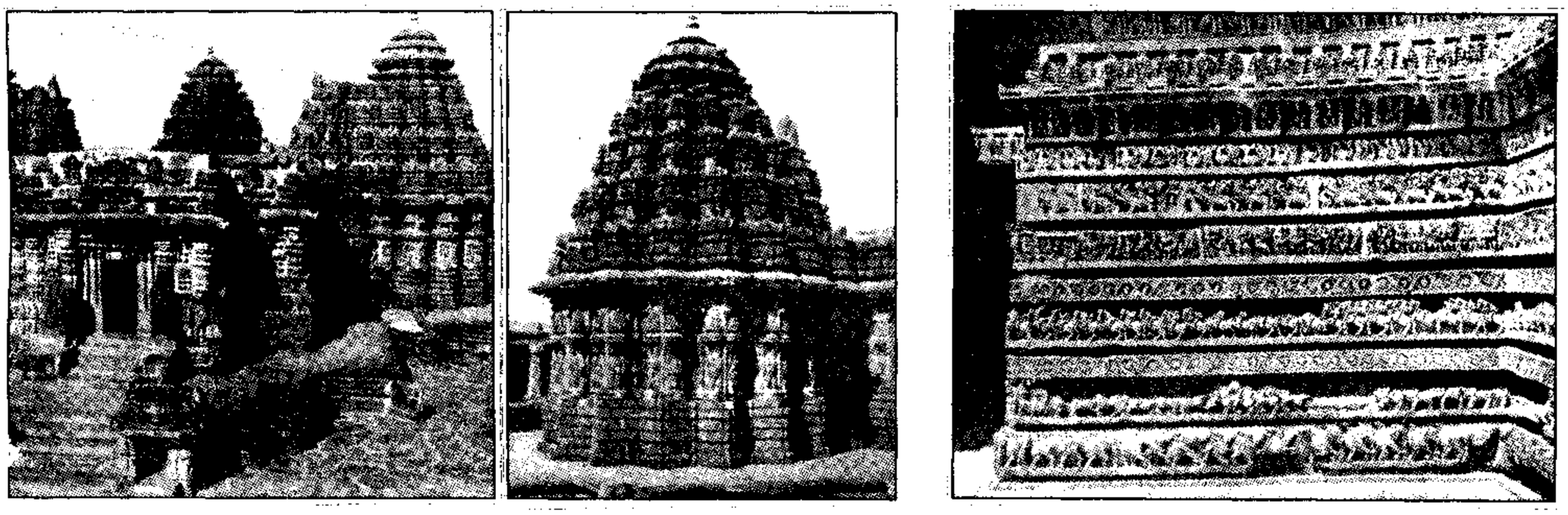
In this changing scenario, art and tech-

Jaina Art

nology have become contentious issues. Which is superior and likely to survive? Out of this, what seems certain is that electronic technologies will continue to penetrate the fabric of our daily life and culture. Paintings (or images) will be created on monitor screens and printed out onto different support materials (like canvas etc) with the help of giant paintjet printers. But at the same time, they will also be made on canvas and paper through the use of traditional techniques and materials, involving deft hand skills. Hand-crafted arts involving painting and sculpture, textiles and other handicrafts are always associated with the direct involvement of a physical input. Being an artist myself, I believe that when a painter applies colour with a brush onto a surface, or a sculptor creates a form from a material, a physical bondage is created in the act. This physicality (associated with our five senses) always arises from a feeling for 'form' and 'rhythm', which are primary to any work of art. The form or the 'marks' created by the rhythm of the tool like the brush in our hand, or the hand itself, conveys the amount of involvement or the emotion of the artist. On the other hand, the image produced with the help of a computer, though conceptually of an equal value, is bereft of a direct physical association. It is graphically manipulated and made to appear on a screen before finally being printed. Here the bodily or physical act makes way for a mechanical process. As a result, the joy of a creation within the organic attachment gets lost. Computer graphics will take us through more sophisticated 'simulated' journeys, providing new forms of visual representations. But the spiritual pathways created by the painters (eg, the traditional Chinese landscape painters) will always take us into a different plane of consciousness—an eternal journey that can never end.

In this present context we have to develop a more rational approach regarding the future of art practices, where both art and technology can coexist. ***Firstly***, we need a good basic and well-resourced educational sector to develop technical skills and knowledge. Through this the inbuilt sensibility or intellect can be nurtured in the right manner. The individual will learn the finer aspects of appreciation. Hence with a developed aesthetic sense a more rational practicality can be asserted in life and culture.

Secondly, there should be a patronage system accessible at all levels involving both the traditional and non-traditional artists. The existing folk-art forms, along with their philosophy, and the handicrafts sector should not remain as relics of a past era. They have to be adequately funded and given space along with the non-traditional art practices. This will



Some Ordinary Samples of the Great Karnataka Art: (a) The Keshava Temple, Somanathpur, (b) A Vimana of the Same Temple, and (c) Details of Temple-Wall Decoration, Halebid

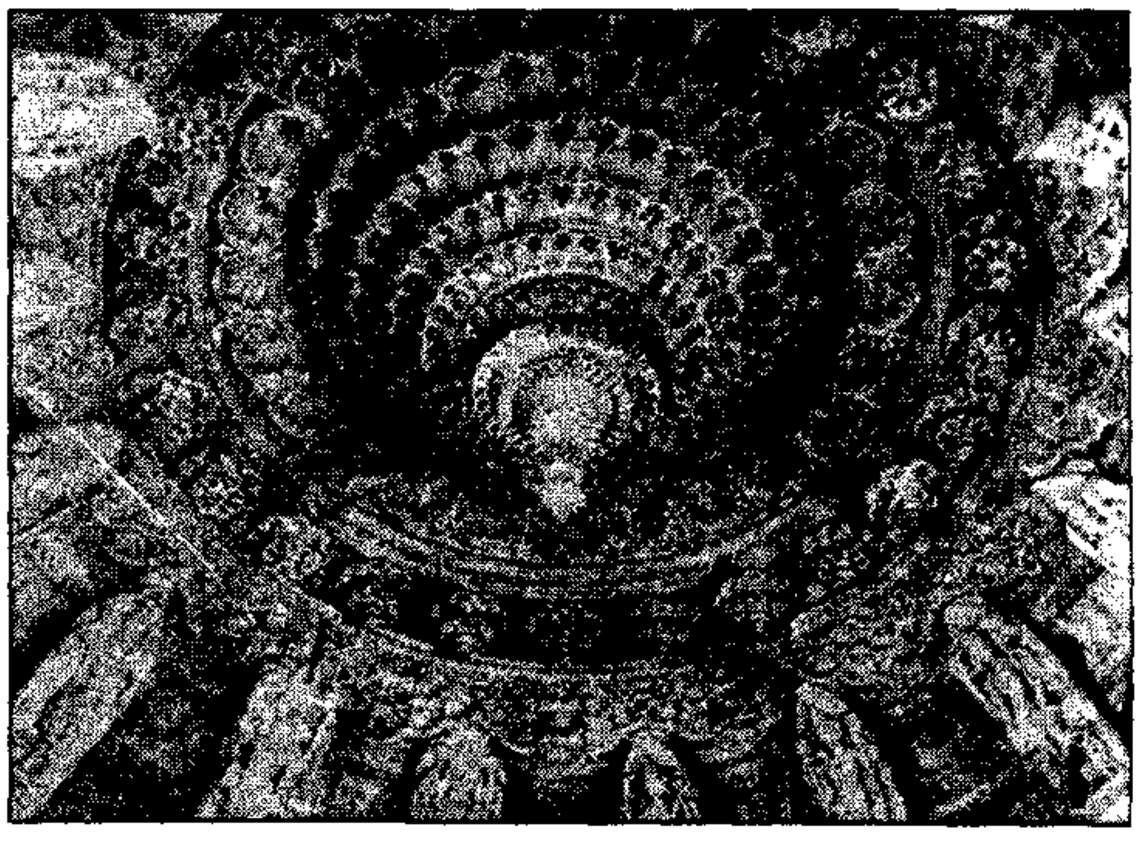
Islamic Art: 'Yogis' Illustration to the Persian translation of Yoga Vasishtha

enrich the sensibility of both the forms of art activity, in the process creating a better work culture. Thus money and access are of prime importance for the production sector to be managed in the right way. An unhealthy and unstable economy gives rise to weak productions.

Finally comes the aspect of indigenism. In this fast-changing face of society we must be aware of our genuine roots. I think that artists, as the creators of a tradition, should also be sensible regarding their own cultural heritage. A country like India has a long and rich history of tradition. The science and structure of each ideological group or section presents comprehensive models for our subjective impulses. The responsiveness of this subjectivity has to be nurtured in the right spirit by not creating rigid barriers, but keeping our mind open to new approaches. Only then can a tradition act in the manner of a 'sieve', thus propagating our ideas. Based on this responsive stratum great individuals like Swami Vivekananda and Rabindranath Tagore developed the spirit of modernization with a universal approach.

With great hopes for every scope and prospect, the ongoing 'search' of artists continues. By means of advanced techniques, artists today can significantly enhance their productivity. But sophisticated production has also resulted in multiple duplicates, which are threatening the originality of art works. At the same time they are also reaching a much wider section. Aesthetic values are being increasingly questioned and altered as the gap between industrial design and fine arts is getting narrower. New technology has upgraded our methods of art restoration and gathering historical records. This has created a greater prospect for research and gaining knowledge. As a new economics related to art has come into play, the age-old artist-patron relationship has given way to an art-market system where the role of the art galleries, institutions, agencies, private collectors and critics have attained enormous influence. Monetary value has also influenced the original value of an art work and the mode in which it is perceived. Thus art has attained the status of big investment and speculation. Whether this is good or bad has to be judged according to individual perceptions and experiences.

Here comes the question of the purpose of art and the function of the artist. This has resulted in the plurality of works, styles, etc, in the present times. But still, even in this problematic (but challenging) environment the creative power has surged on, and it will continue to do so, creating a whole set of new values. As regional boundaries fade we are sure to come closer—promising an 'international wholeness'—in art as well as in life. ❑



The Glorious Jaina Art: Mount AbuCeiling

Vivekananda Studies

Scope, Prospects and Proposals

SWARAJ MAZUMDAR

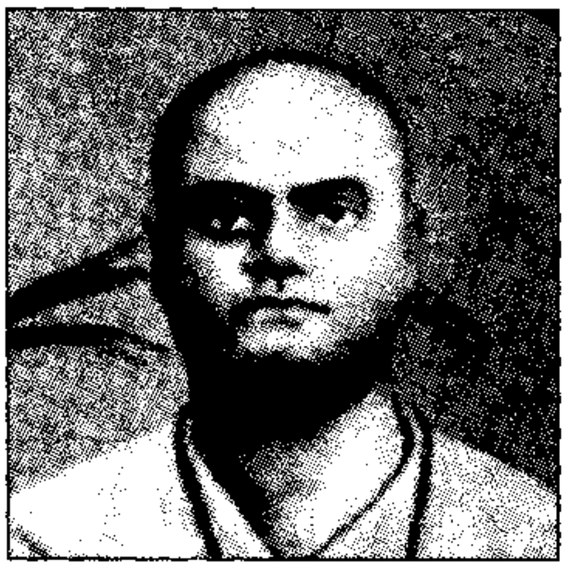
Sri Swaraj Mazumdar was a long-time associate editor of Amrita Bazar Patrika *before becoming Editor of* The Bulletin of the Ramakrishna Mission Institute of Culture, *a philosophical monthly of the Ramakrishna Sangha. Now living in Dehra Dun, Sri Mazumdar is engaged in numerous Vivekananda activities. His noteworthy ideas are presented below.*

The history of human civilization is marked by a quest for three things: truth, freedom and abiding happiness or peace. Though only very few in every age have attained this supreme goal, man has not given up hope. The more a man suffers, the more he wants to go beyond suffering; the more he is in bondage, the more he seeks release. This is the eternal swing of human evolution. Why is this so? The answer is, truth, freedom and bliss are the essence of the true nature of man; these are his birthrights. As of now we have become *apparently* separated from the eternal nature of our true Being; we have to go back to that source once again in order to attain fulfilment. And as long as this urge drives us onward, we have to turn more and more to Swami Vivekananda and study his ideas, philosophy, and remarkable life to be able to get a clue as to how these three—in fact, they are one and the same reality—can be attained in this very life by everyone of us. As a prophet of this inquisitive, scientific age, Vivekananda has no peer. He is simply indispensable for all who want to grow step by step until they manifest their infinite potential for perfection.

SCOPE

Now, what do we mean by 'Vivekananda Studies'? As far as I understand, 'Vivekananda Studies' means studying the whole gamut of his life with an open, truly scientific mind through diverse ways, at the core of which lies not only rational and intellectual understanding, but an unshakeable realization, the profoundest experience that life is one, existence is one. Swami Vivekananda attained this unitive experience and touched the ground Reality in and through the life and teachings of his master, Sri Ramakrishna (1836-86), who was the quintessence of Vedanta. This impersonal Principle of Oneness which Vedanta stands for and which Vivekananda preached in his mighty, thunderous voice throughout his life is not life-negating, but life-asserting; as such, it gives us Herculean strength to face the apparent vicissitudes of life, it gives us joy, beauty, purity, perfection and immortality. Being his master's voice, Vivekananda did not preach any particular religion: he preached the central truth the realization of which reveals what we essentially are, breaking all the barriers of dogmatism, sectarianism and narrowness.

Vivekananda is a grand mirror, as it were, that reveals to us our real identity about which we know very little or nothing at present. Thus, in reality, Vivekananda Studies leads us to the study of man as a whole in all



his three dimensions—physical, intellectual, and spiritual. In his view, each dimension is important, but the highest is the spiritual dimension which, when fully developed, shows man that he is divine, that he is one with God. The aim of Vivekananda Studies is the conscious cultivation of this science of infinite human possibilities.

PROSPECTS

In the recorded history of the world we find many great men and women appearing before us, doing great deeds in their respective disciplines, thus stirring our imagination a little or giving a little push to their national culture or human culture as a whole, and then dissolving in air like a flying spark. They were great no doubt, but mostly they were one-sided. They were at best beautiful portraits drawn in black and white. But the genius of Vivekananda was so syncretic and sweeping, so vast and many-sided, that he may easily be compared to a huge colourful oil canvas without borders. The more you look at that painting, the more you wonder. And not only just wonder, it creates in you a supernal awareness as if you are newly born and transmits leonine power and self-confidence that you too can become as great. Other great personalities humble us, make us look small; but Vivekananda's personality elevates us, makes us look like a giant. Josephine MacLeod, one of Swamiji's great American admirers, writes: 'The thing that held me in Swamiji was his unlimitedness. ... Oh, such nature makes one so free. ... It is the truth I saw in Swamiji that has set me free!'[1] Here are a few lines from Sister Christine, another western disciple of Swamiji: 'He shares the life of those about him, enters into their joys and sorrows, rejoices with them, mourns with them, but through it all, he never forgets who he is, whence he came, or what the purpose of his coming. He never forgets his divinity. He remembers that he is the great, the glorious, the majestic Self. ... Such a being is beyond all comparison, for he transcends all ordinary standards and ideals. Others may be brilliant, his mind is luminous, for he had the power to put himself into immediate contact with the source of all knowledge. He is no longer limited to the slow processes to which ordinary human beings are confined. Others may be great, they are great only as compared with those in their own class. Others may be good, gifted, having more of goodness, more of power, more of genius, than their fellowmen. It is only a matter of comparison. A saint is more holy, more pure, more single-minded than ordinary men. But with Swami Vivekananda, there could be no comparison. He was a class by himself.[2]

It is but natural that such an all-round, multi-dimensional personality that Vivekananda was will be studied and interpreted by many people from diverse angles, depending upon their interests, inclinations and value-judgements. Ever since he became a world-figure, almost overnight, so to say, at the Parliament of Religions held in Chicago in 1893, Swami Vivekananda has been studied from countless viewpoints by the followers of almost all the major religions, philosophers, scholars, theologians, thinkers, linguists, sociologists, economists, educationists, politicians, anthropologists, psychologists, musicologists, historians, scientists, etc. I do not know of a single person in the history of humanity who has been studied from so many

---

1. Swami Jyotirmayananda, *Vivekananda: His Gospel of Man-making*, p. 172.

2. Eastern and Western Admirers, *Reminiscences of Swami Vivekananda* (Calcutta: Advaita Ashrama, 1961), p. 152.

varied perspectives within a span of one hundred years. This shows the depth and dimension of Swami Vivekananda's thoughts, on the one hand, and his universality, on the other. Hundreds of books and thousands and thousands of thought-provoking articles on his life, mission, and activities have appeared so far, and presumably many more will be written in the near future. Vivekananda's neo-Vedanta or the 'Ramakrishna-Vivekananda Vedanta', as it is generally called in the western countries, is not merely a popular subject of academic interest to college and university students only, but many of them are sincerely trying to practise it. I myself have seen how scores of scientists, writers and scholars from the erstwhile Socialist Soviet Union and Communist China have paid their tribute to the genius of Vivekananda and engaged themselves seriously in the study of his Vedantic ideas which, they believe, can help their countries to get rid of the 'all-pervasive moral crises.' 'Does Russia hear the voice of Swamiji, the universal awakener of human souls?' asks R.B. Rybakov, Deputy Director, The Institute of Oriental Studies, Russian Academy of Sciences, Moscow, and says in reply:

> A preacher of an eternal philosophy, Swamiji is the most suitable person to help our country today. What is required by a tormented land is moral rejuvenation. Swamiji himself has said that even if all the wealth of the world were invested in one village of India, the conditions there would never improve. What is required is the awakening of sleeping souls. The philosophy of Vivekananda is a perfect blend of religion and science, and it contains ample flexibility. It is definitely not bound by an imposed rigidity, as most ideologies are.'[3]

Huang Xin Chuan, Professor of History of Beijing University and Deputy Director of the Institute of South Asian Studies, Beijing, is the author of the book *The Modern Indian Philosopher Vivekananda: A Study* (1979). I met Dr Chuan a few years ago when he came to Calcutta. In course of conversation he reiterated the view that 'we in China do not consider Swami Vivekananda just a religious leader. We consider him one of the greatest social reformers of modern India.' In a lecture delivered at the Asiatic Society, Calcutta, on 4 January 1980, Prof Chuan said, 'Vivekananda stands out as the most renowned philosopher and social figure of India in modern China. His philosophical and social thought and epic patriotism not only inspired the growth of nationalist movement in India, but also made a great impact abroad.'[4]

The statements made by Prof Rybakov and Prof Chuan are very significant because they represent a very rigid and orthodox political system which eyed all religious aspirations with great suspicion until a few years ago. In India, Europe, and the American continent, Swamiji's ideas are being studied with more and more renewed zeal and the impact of the study, at both theoretical and practical levels, are finding expression through various channels—socio-religious attitudes, moral conduct, administrative and institutional decisions. In Japan, Singapore, Sri Lanka and a few other South-

---

3. R.B. Rybakov, 'Vivekananda for Post-Communist Russia' in *Swami Vivekananda—A Hundred Years Since Chicago: A Commemorative Volume* (Belur Math: Ramakrishna Math, 1994), p. 755.
4. *World Thinkers on Ramakrishna-Vivekananda*, ed. Swami Lokeswarananda (Calcutta: The Ramakrishna Mission Institute of Culture, 1983), p. 67.

east Asian countries, which are predominantly Buddhist, Vivekananda's philosophy is being studied and, with the passage of time, it is bound to scale new heights. So with Australia. Lastly, we should not overlook Africa. Although the Durban Ramakrishna Centre of South Africa has been doing an excellent job for the past 47 years, there is still vast scope for encouraging Vivekananda Studies in other African countries. Africans are wonderfully strong in body: if they can be made familiar with the universal message of Vedanta, their mind will get a new boost, a great confidence that they are on a par with other peoples of other nations.

In Vivekananda Studies so far three distinct approaches are evident. One may be called devotional or reverential. The second may be called analytical or comparative. And the third is the practical or spiritual. Each approach has some value, though they are often one-sided and partial; hence the conclusions they arrive at do not do full justice to the comprehensive philosophy of Swami Vivekananda. For example, those who have viewed Vivekananda as a patriot are right. But then, he was a global person or even more than that, for he identified himself with the entire cosmos. Those who think that Vivekananda was a social reformer are not entirely wrong. But then, by 'reform' Vivekananda meant root-and-branch reform, not just an imposition of superior rules from above. Real reform was to him the awakening of divine consciousness in man. Again, those who argue that Swamiji said that religion is not for the empty stomach are invariably right: but Swamiji also pointed out that eating, drinking and indulging in beastly materiality only is not the goal of life, one must cultivate one's higher or spiritual dimension also. Thus Vivekananda must be studied in his totality, otherwise there is the risk of misinterpreting him. In this respect the spiritual approach is the best, as it includes the other two approaches also and takes us step by step through practice and not just through theoretical speculations to the ultimate Truth or Freedom or Bliss, which is the goal of human life. Vivekananda said many things in many contexts to persons of different predispositions. Those sayings should be taken and studied in conjunction with his general stand that the final solution of human problems depends on the individual's moral and spiritual life and that the spiritual oneness of mankind (or of all beings) is the foundation of morality. The vision of this divine unity is the way to universal love.

Swami Vivekananda dreamed of a human civilization which must combine idealism with efficiency, which must be born out of a happy commingling of eastern and western cultures, a blending of equitable material happiness with spiritual wisdom, with science and religion shaking hands. The motto of that civilization will be 'unity in diversity' and not social Darwinism; cooperation and not competition. 'Self-sacrifice, indeed, is the basis of all civilisation,' says Swamiji.[5] 'Civilisation, true civilisation, should mean the power of taking the animal-man out of his sense-life—by giving him visions and tastes of planes much higher....'[6] 'True civilization does not mean congregating in cities and living a foolish life, but going Godward....'[7] 'It is the feeling of the divine within.'[8] Happily enough, mankind's thirst for spiritual power and knowledge is increasing day by day, his yearning to break down the barriers of caste, creed and colour and fuse all peoples into one humanity is getting stronger and stronger. This is a positive sign of our long march to-

---

5. Swami Vivekananda, *The Complete Works* (Calcutta: Advaita Ashrama, 1989), Vol. 7, p. 269. [Hereafter, *Complete Works*.]
6. *Complete Works*, Vol. 4, p. 284.
7. *Complete Works*, Vol. 9, p. 222.
8. *Complete Works*, Vol. 8, p. 228.

wards oneness. The findings of modern science is also strongly helping that trend—the Vedantic trend. So the ground is well prepared and there are infinite possibilities. What is required now is to bring 'all the forces of good together.' This is Swamiji's prescription. He says, 'Do not care under what banner you march. Do not care what be your colour—green, blue, or red—but mix up all the colours and produce that intense glow of white, the colour of love. Ours is to work. The results will take care of themselves. If any social institution stands in your way of becoming God, it will give way before the power of Spirit.'[9]

PROPOSALS

If Swami Vivekananda preached anything very extensively through his lectures and writings, it is man-making education which is, in the true sense of the term, 'secular', ie, of enduring value, because it is based on an impersonal principle. My ***first proposal*** is that the educational institutions of India—from the school to the university level—should be inspired to include into their curriculum some reading material pertaining to his man-making education. Philosophy students at college and university levels should be given an opportunity to study extensively Swamiji's philosophy, specially his Practical Vedanta. **If it can be studied in countries like China, Russia, USA, Canada, etc, why cannot it be studied in colleges and universities of his own motherland?** The education ministries should seriously think over this question.

Secondly, the admirers of Swamiji should take active interest in opening 'Vivekananda Study Circles' in all the major cities and specially rural areas. The purpose of these Study Circles will be to discuss the life and message of Swami Vivekananda under the guidance of experts and to put his lofty ideas into practice in our daily lives. If this is done, many problems facing our villages can be easily solved by the villagers themselves. This may lead to national integration. ***Thirdly***, our youths must be told very emphatically that the goal of 'religion' and 'science' are not contradictory but complementary. They should also be made conscious that religion is also a *science—the science of human growth*. As in science so in Vedantic religion, endless scope for enquiry and experimentation exists. Sri Ramakrishna's life proves this point. They must also be told that true religion is not against science. As such they must ask themselves why the followers of 'science' should have an unscientific attitude towards 'religion'—a discipline about which they have no experience whatsoever.

Fourthly, it should be clearly explained to students and youths in general, with the help of facts, that the words 'science' and 'West' are not synonymous. It is a gross misconception and misinterpretation of these two words. India and other countries in the East reached the zenith of scientific knowledge thousands of years before the West had learnt to spell the word s-c-i-e-n-c-e. It should also be brought to their notice how modern physicists, biologists and others are coming to accept the Upanishadic conclusion that the One undefinable, indescribable entity or Reality exists throughout the cosmos. Therefore they should note that being modern does not necessarily mean being outwardly 'western'. Blind imitation is no good.

We must accept anything good from anywhere, East or West, but with discrimination. Swamiji did exactly that and that is why he is the perfect ideal of the youth and the old. He is a bridge between antiquity and modernity, science and religion, secularity and spirituality, Man and God. In the mould of his Master Sri Ramakrishna, Swami Vivekananda is the absolute epitome of harmony, the sublime expression of the universal Soul. ❑

---

9. *Complete Works*, Vol. 4, pp. 352-3.

The Future Woman

Scope, Prospects and Proposals

PURBA SENGUPTA

Ms Purba Sengupta, from Calcutta, is a well known writer in Bengali. Her writings appear regularly in Bengali dailies. She is the author of many books, of which Ekanno Pītha, Jātaka Mālā, Veda O Vivekananda, *etc, are famous. We thank Ms Sengupta for the insightful study of the future woman, with Swami Vivekananda's ideas at the background.*

The contribution of woman to human welfare has been vital. She has been the central theme in all discussions of social scientists. The great social scientist of the 19th century, Swami Vivekananda, has pointed out that woman is a social force. This social force is more creative and powerful than man. So Swami Vivekananda has said that if for five hundred men it would take five hundred years to transform India, for five hundred women it would hardly take a few weeks. According to him, the best yardstick of the progress of any culture is in the way it looks upon its women. In the West woman is regarded as wife, while in India she is the mother. Woman is the centre of the family circle, and the firmness of this centre lies in her purity.

Holy Mother Sri Sarada Devi: The Ideal of Perfect Womanhood

In one of his oft-quoted statements, Vivekananda has remarked that India is the land of Sita, Savitri and Damayanti. If we study these three characters we shall see that their fundamental trait was devotion to their husbands. Vivekananda has given supreme importance to one-pointed devotion in women. This is because it is one-pointedness that stabilizes a society. The foundations of a noble society are its beautiful families and noble citizens.

Swami Vivekananda has spoken about the need of the awakening of women at a critical juncture in history. In this awakening, he has desired that women should have a combination of (a) heroism and softness, and (b) the ideals of motherhood and pure wifehood. When he spoke about the ideal of the heroic woman, the Rajput women would come before his mind's eye. When Rajput men would go for war, their wives would salute their husbands, help them wear their armour, and say, 'Return with this armour on your body, or may they bring your body, with this armour on.' He would describe the ideal Rajput woman's story so graphically that she would stand alive before the listeners. He would appreciate the brave ladies who, instead of succumbing to the terrible desires of alien invaders, would embrace death with immense joy. He would, therefore, say that women should become like the Rajput ladies of the past—pure and brave.

Swamiji would discuss Ahalya Bai with Nivedita and wish that the future woman should not only be like Ahalya Bai but should far excel her. He has said in one place: '[Our women] have all the time been trained in helplessness, servile dependence on others, and so they are good only to weep their eyes out at

The Queen of Jhansi, Lakshmi Bai: Ideal of Heroism

the slightest approach of a mishap or danger. Along with other things they should acquire the spirit of valour and heroism. In the present day it has become necessary for them also to learn self-defence. See how grand was the Queen of Jhansi!'[1] But Swamiji wanted women to be modest. So he has also spoken something altogether contrary to this when he says: 'In the West, the women...appeared to be quite the replicas of men! Driving vehicles, drudging in offices, attending schools, doing professional duties! In India alone the sight of feminine modesty and reserve soothes the eye! With such materials of great promise, you could not, alas, work out their uplift! You did not try to infuse the light of knowledge into them.'[2]

Along with the combination of softness and heroism, Swamiji wished to see a harmony between the ideals of motherhood and wifehood. In the flow of time the parts played by the women of the East and the West had become different. Their harmony is necessary now and in the future. He says:

If you ask, 'What is an Indian woman as wife?', the Indian asks, 'Where is the American woman as mother? What is she, the all-glorious, who gave me this body? What is she who kept me in her body for nine months? Where is she who would give me twenty times her life, if I had need? Where is she whose love never dies, however wicked, however vile I am? Where is she, in comparison with her, who goes to the divorce court the moment I treat her a little badly? O American woman! where is she?'[3]

Now, for the future woman, the ideal is not merely a combination of motherhood and ideal wifehood; she should also be of a modern outlook. Sister Christine has said that for Swamiji, liberation of woman means delimitation, the removal of limits and constraints, so that she can manifest her best. Swamiji's plan for women's education wasn't merely religious by nature. He has stressed scientific education too. He would assert that women should be given scientific knowledge. However, it should be done without harming the religious spirit. 'History and the Puranas, housekeeping and the arts, the duties of home-life and principles that make for the development of an ideal character have to be taught with the help of modern science, and the women students must be trained up in ethical and spiritual life.'[4] He would say that education for women should first of all be imparted in mother tongue. Then there should be Sanskrit learning. Then English, history, geogra-

Nivedita: The Ideal Modern Woman with an Ideal

1. Swami Vivekananda, *The Complete Works* (Calcutta: Advaita Ashrama, 1989), Vol. 5, p. 342. [Hereafter, *Complete Works*.]
2. *Complete Works*, Vol. 6, p. 491.
3. *Complete Works*, Vol. 8, p. 57.
4. *Complete Works*, Vol. 6, p. 489.

'From Prison to Citizenship.' Woman's Fight for Justice.
On 18 June 1910 more than 10,000 suffragettes took to the streets in London

phy, science, maths, etc. Along with all these there should be training in handicrafts, embroidery, tailoring, home-industry, etc, without, of course, forgetting cooking, childcare and other allied subjects. While learning the knowledge of the West, one should also have a reverential attitude towards India and its historical tradition.

Who will fulfill this educational dream of Vivekananda? Swamiji therefore thought of a women's monastic order. He would say: 'And so I have it in my mind to train up some Brahmacharins and Brahmacharinis, the former of whom will eventually take the vow of Sannyasa and try to carry the light of education among the masses, from village to village, throughout the country, while the latter will do the same among women. But the whole work must be done in the style of our own country. Just as centres have to be started for men, so also centres have to be started for teaching women. Brahmacharinis of education and character should take up the task of teaching at these different centres.'[5]

> To make a beginning in women's education: our Hindu women easily understand what chastity means, because it is their heritage. Now, first of all, intensify that ideal within them above everything else, so that they may develop a strong character by the force of which, in every stage of their life, whether married, or single if they prefer to remain so, they will not be in the least afraid even to give up their lives rather than flinch an inch from their chastity. Is it little heroism to be able to sacrifice one's life for the sake of one's ideal, whatever that ideal may be? Studying the present needs of the age, it seems imperative to train some women up in the ideal of renunciation, so that they will take up the vow of lifelong virginity, fired with the strength of that virtue of chastity which is innate in their life-blood from hoary antiquity. Along with that they should be taught sciences and other things which would be of benefit, not only to them but to others as well, and knowing this they would easily learn these things and feel pleasure in doing so.[6]

During his years of spiritual struggle and later, Sri Ramakrishna had revered the social value of woman. He had told Gauri Ma, one of his disciples: 'I shall pour water, you mix the concrete.' Gauri Ma was surprised: 'Where's the concrete here?' Sri Ramakrishna had smiled and answered: 'I said one thing and you understood another. The women of this country are suffering terribly. Do something for them.' It was to fulfill his great idea that

Florence Nightangle (seated, centre) with friends: The Service Ideal

5. Op. cit.
6. *Complete Works*, Vol. 5, pp. 342-3.

The Ideal Devotees of Modern Times: Gopaler Ma, Golap Ma and Jogin Ma

Swamiji thought of a women's monastic institution. 'Hence, in the Ramakrishna Incarnation, the acceptance of a woman as the Guru, hence His practising in the woman's garb. ...hence too His preaching the motherhood of women as representations of the Divine Mother. Hence it is that my first endeavour is to start a Math for women. This Math shall be the origin of Gargis and Maitreyis, and women of even higher attainments than these.'[7] Swamiji had a clear idea of the proposed women's monastery. He had wished that it should be on the eastern banks of the Ganga. After having proper education in this institution, girls could return home too, if they wished. Or, if they desired, they could remain celibate all their lives. 'These celibate nuns will in time be the teachers and preachers of the Math. In villages and towns they will open centres and strive for the spread of female education. Through such devout preachers of character there will be the real spread of female education in the country. So long as the students will remain in association with this Math, they must observe Brahmacharya as the basic ideal of this Math.'[8] Sister Nivedita speaks about this idea of Swamiji thus: 'In all his plans for a widows' home, or a girls' school and college, there were great green spaces. Physical exercise, and gardening, and the care of animals, must form part of the life lived there. Religion, and an intensity of aspiration more frequent in the cloister than outside it, were to be heart and background of this new departure. And such schools, when the winter was over, must transform themselves into pilgrimages, and study half the year in the Himalayas. Thus a race of women would be created, who should be nothing less than "Bashi-Bazouks of religion."'[9] The Bashi-Bazouks were the body-gaurds of Caliphs. They were renowned throughout Europe for their fierceness and courage.

It's evident from all this that what Vivekananda desired was both spiritual as well as family-cum-social welfare for the woman. Along with a harmony of the eastern and western ideals of womanhood, Swamiji also sought education for woman, which alone would make her self-reliant.

In 1899, he gave an interview to *Prabuddha Bharata* on the welfare of Indian woman, which was subsequently published as 'On Indian Women—Their Past, Present and Future.' In it, he says: 'Why, to the women of this country I would say exactly what I say to the men. Believe in India and in our Indian faith. Be strong and hopeful and unashamed, and remember that with something to take, Hindus have immeasurably more to give than any other people in the world.'[10] ❑

7. *Complete Works*, Vol. 6, p. 328.
8. *Complete Works*, Vol. 7, pp. 217-8.
9. Sister Nivedita, *Complete Works* (Calcutta: Sister Nivedita Girls' School, 1967), Vol. 1, p. 196.
10. *Complete Works*, Vol. 5, p. 232.

Indian Management for the Future

DR NALINI V. DAVE

Dr Nalini Dave is Professor, Department of Commerce and Business Administration, Saurashtra University. She has more than three books and 30 research papers on management to her credit. She was awarded several prizes; of them, twice by the Institute of Chartered Accountants of India, and twice for inter-university excellence by Hari Om Ashram. Indian philosophy and management are her dear subjects and she has done elaborate research on them. With this background, Dr Dave promises a bright future for Indian management.

During the beginning of the 20th century, India imbibed management techniques mostly from the United Kingdom, and then it turned to the USA. After independence it adopted a mixed economy model, based on socialism (former USSR) and capitalism (USA and UK). Later, the world witnessed the total collapse of the socialist model in the USSR and other eastern European countries. Around this time, the world was impressed by the rapid growth of Japan and turned to Japanese-management thought. India was also not an exception. The Japanese, no doubt, took some of the management concepts and techniques from the West, but they enriched the same by their cultural ethos, continuously improving their products by the application of their innovative genius. But the question is, how relevant is it to adopt the Japanese or any other management model for India? Mere copying will never work. This does not mean that we should keep our doors closed. The Vedas teach us, 'Let noble thoughts come to us from all directions.' What is important is how we interpret, adopt and assimilate these external influences to suit Indian culture and tradition.

India is possibly one of the few civilizations with a long history and unbroken continuity of its culture and ethos. Management is never something new to Indians. Ancient India was a leading country in the world in various fields. India was a leader in business for centuries and Indian products sold worldwide. The *Mahābhārata* (Śāntiparva) and Kautilya's *Arthaśāstra* discuss the management of the State in detail.

Our scriptures have much to contribute towards management, so that we can build up our own management system. Work culture, organization, leadership motivation, management of men—all these are dealt with in our books. Though our scriptures are not directly related to management as such, if managers know the concepts and truths of Vedānta, they can manage things far more excellently than otherwise. This is the beauty of Indian philosophy. Moreover, spiritual leaders like the Buddha, Sankara, Guru Gobind Singh, Vivekananda, etc, were able organizers.

We shall point out only a few things which are special to Indian management here. We shall deal with the basic concepts of the Indian way of management as reflected in our scriptures.

Unique Work Culture

In determining the quality of work, work culture is very important. This work culture is influenced by so many factors, like socio-economic and religious background of the employees, interest in work, attitude towards work, work environment, working conditions, behavioural approach of management, sincerity, commitment to performance, etc. Western management is used to affect these factors positively with the help of various kinds of tools and techniques, like financial and non-financial incentives. But in the present scenario of changing labour market, these

incentive tools are becoming less effective and sometimes redundant. The Indian way of viewing work is more pragmatic and aims at an appropriate work culture.

Indian scriptures consider work as duty (sadhana). Since we are not creators of life/energy that enables us to work, it is not proper to measure the returns of our efforts only in terms of material rewards. Work is natural for human beings and it is the only means for growth and development. The Atman is one and the same in every being and it is divine and has immense potentiality. We can manifest this divinity only through our work. Moreover, every work performed as duty is to be offered to the Divine within. Hence work has to be pure and righteous. Further, every work is sacred and important in its own place. No work is considered either superior or inferior. What is important is the attitude behind the work. Dharma is uniquely defined as the performance of duty in any given situation, which is possible only through work. If a manager performs his job with sincerity, honesty and dedication, he performs his dharma. Such attitude makes his work a worship. The workplace becomes a place of worship for the employees in Indian culture. Everyone performs work, considering it as a duty, where no external tools are required to affect them positively towards better performance. Thus, if work is understood in the Indian perspective, appropriate work culture will be cultivated in a natural way.

Concept of Organizations

An organizational structure represents work, people, their inter-relationships and a logical arrangement of its different components. The objective of the organization is to achieve its goals and get maximum profit, prosperity, and a sizeable market share. But in Indian culture profit-making is not the major goal. Business is to be based on human values. Most of our scriptures (Smṛtis, specially) narrate duties, which are in fact social responsibilities, a concept that stands powerfully against the major goal called profit motive as seen in the western context. It is stated in our scriptures that as we are born, grow and live in society, we are indebted to it. Organization is also a part of the society; hence it is responsible for the betterment of the society despite its concern for profit-making.

Growth and development of an organization are essential in a competitive environment and they are the responsibilities of management. Is Indian philosophy against this? Not at all. Indian philosophy states that the very purpose of work is to grow, to manifest the capabilities and divinity within oneself. Growth is interpreted in three ways: (1) Growth of the head (knowledge) indicates intellectual growth, creativity, innovative ability, etc; (2) Growth of the heart (empathy) indicates concern for people, a humane approach and understanding; (3) Growth of the hand (skill in action) indicates the development of new technical skills in action and the art of doing things with dedication.

The employees within an organization are required to develop in all the three ways. Moreover, a man has two aspects: individual and collective. Growth of the one ignoring the other is harmful. The socialistic pattern of the Soviets failed because in the name of socialism individuality was curbed; capitalism failed because in the name of individualism people at large were ignored. Thus organizational growth should take place in such a way that not only people associated directly with organizations but society as a whole should also be benefited.

Thus the concept of social responsibility is interwoven with organizational growth and development in Indian culture. Krishna says in the *Bhagavadgītā* (3.13) that all sorrows and problems in society would be removed if socially conscious members were to feel satisfaction in enjoying the 'remnants' of their work performed in a spirit of sacrifice (*yajña*). He states further that those who are selfish (lit, 'those who themselves eat without offering') are criminals. This shows that Indian philosophy is against selfish enjoyment of wealth.

Gandhiji's trusteeship principle emerged from this basic concept, where one is to consider oneself a trustee and not the owner of the wealth he has and should make use of it for the well-being of others. The 'Kapila-Devahūti Saṁvāda' in *Bhāgavata* also describes the concept of worship of God in human beings, which has been made more clear by Swami Vivekananda.

In this way the major goal of any organization will not be only profit and material success but the overall upliftment of its members in particular and the society in general. This will be the important rule of management in the future. This Indian vision will bring prosperity for all, which is most important to maintain peace and stability in a rapidly growing society, with all its complexities.

Leadership

Leadership plays a significant role in the success-story of an organization, though it is a part of management and not all of it. Managers plan and organize a programme, while leaders influence to implement them successfully. Managers give orders and instructions, and use authority, while leaders guide, inspire, consult and depend on confidence. In today's environment we need a manager who can also be an effective leader.

In the *Bhagavadgītā* it is said: *'Yad-yad-ācarati śreṣṭhas-tat-tadevetaro janaḥ; sa yat-pramāṇaṁ kurute lokas-tad-anuvartate.* Whatever a leader does, others do that very thing. Whatever he upholds as authority, an ordinary person follows that.'

In organizations, a person at the top is described as the leader (*śreṣṭha*). At the middle and low strata also some persons manage others, and hence they are also *śreṣṭhas*. Thus, every organization has a hierarchy of *śreṣṭhas*. Whatever the great one does is followed by others, who look upon him as *śreṣṭha*. This is a psychological truth. If the leader is kind, sincere, honest, hard-working, and dedicated to his job, others cannot be inactive, idle or dishonest. This shows that a leader's conduct should be exemplary. He has to be very careful in his thought, speech and action as he is being watched and followed always by others.

In today's world different cultural backgrounds and factors play an important role in organizations. People from different cultures, races, religions, etc, work together in an organization. To manage such organizations management needs a special skill. In such cases, some important qualities of leaders described in our scriptures, like skill in dealing with people, emotional maturity, macro vision and familiarity with the psyche of people whom they are going to lead or manage are very appropriate to manage multi-culturalism in the future.

Moreover, the *rājarṣi* concept of leadership will be more successful and effective all over the world in the future. The concept indicates that a leader should be a *rājarṣi*: *rāja* (king capable to govern) and *ṛṣi* (individual with divine qualities). Such leaders could move entire masses of people. Mahatma Gandhi is the most appropriate example of the *rājarṣi* type in India. Further, Indian philosophy emphasizes that leaders should be able to lead not only towards material progress but also towards spiritual progress. Apart from this a leader is also required to develop the third eye—the eye of insight and foresight. That is, before taking a decision he must think about the implications of the actions to be taken in the times to come. Will his actions deliver a long-term or short-term gain? Such thinking is crucial to management for the future. This is nothing else but the concept of strategic management/planning with all of its aspects developed in the 1980s by western thinkers.

At present the whole world is being woven into one fabric through the process of globalization. Hence leaders are required to develop a 'macro vision', as taught in our Upaniṣads, in the absence of which they may create problems and conflicts for the present as well as future generations. Thus, a leader is required to view every issue on a bigger canvas.

Further, a leader should understand that

the dichotomy between personal and professional life has to be scrapped. Our scriptures insist that an individual should be given an opportunity to grow and develop as a whole. Thus, a leader should be able to mould the life of his followers in such a way as to promote harmony between the individual and the group, the group and the society, and the society and the whole of mankind as required by Indian culture and by the world of future business and industry.

Western management philosophy had advocated some motivational tools and participative concepts of management to win the loyalty, enthusiasm, initiative, commitment, etc, of the employees during the second half of the 20th century. But India has a very comprehensive vision of corporate life since the Vedic era. The *ṛṣis* reminded us in the following precepts the essence of excellent leadership and efficient management:

Common be your prayers,
Common be your ends,
Common be your purpose,
Common be your deliberations,
Common be your desires,
United be your hearts,
United be your intentions,
Perfect be the union amongst you.

The above in mantra-form are the keys of harmonious relationships and smooth functioning of organizations. If organizational objectives are thus established by involving all the employees in the deliberations, which reflect the desires of everyone, it will certainly bring them together, leading to the unification and union of all members of the organization. This is the unique concept of leadership in our scriptures and it would be more pragmatic for the management of the future. ❑

Yudhishthira's Style of Management

The undramatic yet profound greatness of Yudhishthira comes out in the way he manages to adhere to his high ideals of moral conduct, even though surrounded by persons like Bhima and Draupadi, whose forthright nature cries out for vigorous resistance to cruel unfairness. Condemned to live as exiles in the forest, Bhima muses over all that has happened and is provoked into this challenging utterance: 'The wise say that virtue means elevating oneself. This degradation is unworthy. ... It is only cowards, incapable of fighting for their right, who cherish sterile despair. The too righteous man becomes devitalised through his virtue, merit and profit desert him, just as the capacities for joy and suffering desert the dead....' Draupadi cannot adopt so preemptory a tone towards Yudhishthira. She says: 'Men are puppets turned in the hands of God. The creator plays with them just as a child plays with toys. Man has no power over his actions. He is like a blade of straw blown hither and thither by the wind....' Yudhishthira tells her that her thoughts are the thoughts of those whose faith in the cosmic order has been destroyed. He replies: 'If acts do not bring in their returns, the world would be an immense deception. Acts do bear fruits, good and bad. A Providence rules the world. ... My heart, O Draupadi, is naturally attracted towards virtue. The man who wishes to reap the fruits of virtue is a trader in virtue.' Finally, after the great war, when Duryodhana lay bleeding, Bhima exulted over his fallen enemy. Yudhishthira felt the pity of it all, and the most revelatory of his utterances are his words to the enemy, from whom he had received so much ill-treatment: 'Sinless Duryodhana, you must not feel sorry for yourself. Laudable is your death. It is ourselves, bereft of dear kinsmen, who should be pitied.'

—retold from Krishna Chaitanya, *A New History of Sanskrit Literature*

The Future of Music

APARNA CHAKRAVARTI

Smt Aparna Chakravarti is a well-known musician and music critic. She has been contributing articles at regular intervals to important Indian dailies. She is also famous as the exponent of the Agra Gharānā, and has participated in numerous international music conferences. In this comprehensive write-up, she presents the scope of music in the future and proposes ways and means to propagate it.

If we are to peep into the future, we have to familiarize ourselves not only with the present but also with the past, as each mingles with the other.

Indian music has a hoary past, going back into the Vedic age. Instead of going into labo-

Saint Tyagaraja: The Patriarch of Carnatic Music

rious details, we might say that this ancient art form is based on sound scientific principles. Bharata's *Nāṭyaśāstra* in its present form was completed by 200/300 AD. The basic principles of music were analysed with clarity. They are just as relevant today as they were so many centuries ago. Bharata's classification of various instruments was so thorough that in 1877 when the Conservative Royal de Musique was formed in Brussels, the fourfold division of Bharata's, viz, *tata*, *ghana*, *suśira*, and *ānaddha* was adopted in toto. Sāraṅgadeva's *Saṅgitaratnākara* is perhaps the most important book on musicology after *Nāṭyaśāstra*. This book was written about 1230 AD. By then the old music had practically died away. The knowledge of *jātis* of Bharata would have been just history but for Sāraṅgadeva's notations with *sargams* of *jātis*.

Yehudi Menuhin, the celebrated violinist, once remarked: 'Melodically and rhythmically, Indian music long ago achieved a complex sophistication which only in the 20th century with the work of Bartok and Stravinsky, has western music begun to adumbrate.'

From the Vedic chants to *jātigān* to *prabandhagit* to the still extant *dhrupad* there runs a uniting thread which has preserved Indian music as a living tradition.

From ancient times there had been a close connection between the practice and theory of music. Later on, though great strides were made in the practice of music, the theory was neglected. Sporadic efforts at codification and systematization were made, for example, by Raja Man Singh Tomar of Gwalior (1486-1519) who wrote a book, *Man Kutūhal*, with the help of *nāyaks* Bakshu and Baiju (a *nāyak* was cognizant with both the theory and the practice of music, while a *gāyak* was only a performer). Raja Man Singh played a very important role in the development, popularization and propagation

Muthuswami Dikshitar: Composer of Carnatic Music

Maharaja Swati Tirunal: Great Carnatic Composer

of the *dhruvapada* or *dhrupad*.

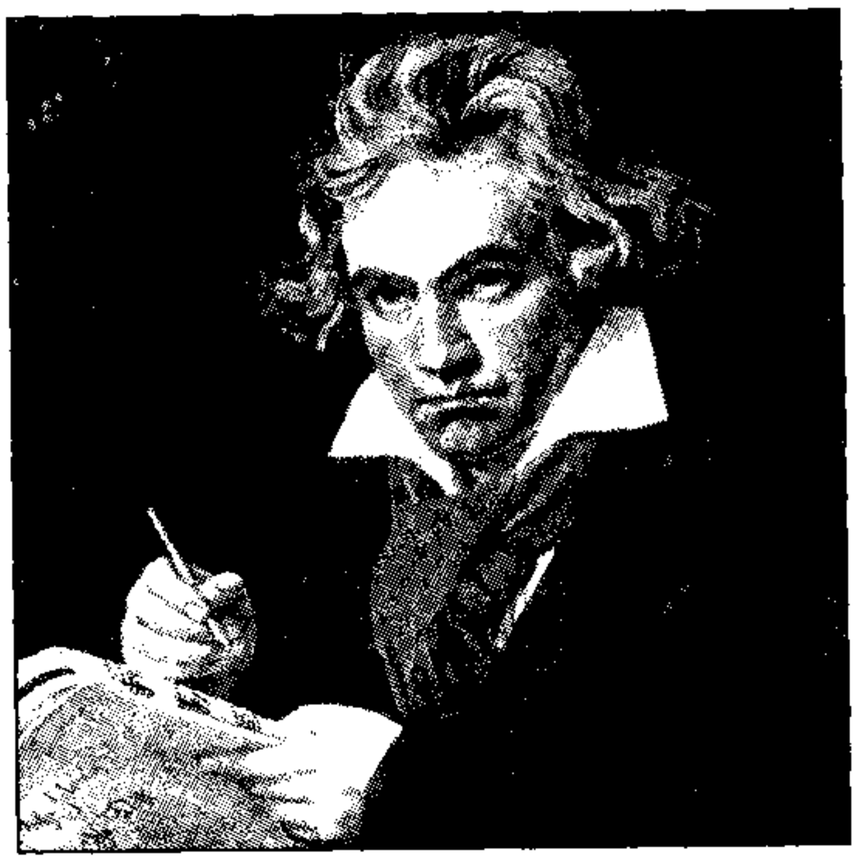
The Muslim conquest of India had a great influence on north Indian music, though it made hardly any impact on Carnatic music. In this context we must mention Amir Khusrau, a musical genius who in his long fruitful life contributed much to Indian music. He created new *rāgas* by mixing Persian airs with Indian melodies, such as *sarparda*, *sazgiri*, and *aiman* (known as *yaman* now). He invented the *tarānā*—so popular these days—and some *tālas* such as *farodast* and *pashto*.

For centuries *mārg* or *gandharva saṅgīt* (classical music as it is now referred to) flourished in temples and the courts of kings. Side by side we had *deśī*, which had its roots deep in the soil of its origin.

The Mughal emperors—even Aurangzeb, who later advised its 'burial'—were patrons of music. The court of Akbar could boast a galaxy of poets, musicians, and philosophers; Miyan Tansen was perhaps the brightest star among them. He was born in Behata near Gwalior in 1506. His title, *tānsen*, became so well known that his real name was forgotten. Tansen went to Akbar's court from the court of Raja Ramchandra of Rewa. Hundreds of *dhrupads* by Tansen, who was a great composer as well as great artiste, have come down to us, meticulously preserved from *guru* to *śiṣya*. Though he had embraced Islam, Tansen had composed songs in praise of deities of the Hindu pantheon. We might mention here that songs eulogizing the patrons of music can be traced to this era. Classical music as we know it today can also be traced to the age of Miyan Tansen (*'miyān'* was an honorific title bestowed on noted people in Akbar's court and not exclusively on Muslims). From Tansen's progeny on his son's side we had *dhrupadias*, and from his daughter Saraswati's (who was herself proficient in music) we had what is known as the Senia *gharānā* of instrumentalists—*rabābias* (those who played the *rabāb*) and *bīnkars* (those who played the *bīn*). Raja Nawab Ali of Akbarpur learnt many *dhrupads* from Mohammed Ali, a descendant of Tansen from the male side. He has given them with notation in his book *Marfane-Naghamat*. Chamman Sahib and Nawab Sadiq Ali Khan of Rampur also learnt from Mohammed Ali. Chamman Sahib taught many pupils, among whom were Alauddin Khan Sahab and Bhatkhandeji. Some musicologists are of the opinion that another descendant of Tansen, Bahadur Khan, came to Bishnupur (Bengal) and was in the employ of Raja Raghunath Singh II. By grooming many pupils there, he formed the nucleus of the only classical music *gharānā* in Bengal, the Bishnupur *gharānā*.

Another musical genius appeared in the 18th century. He wrote under the pseudonym 'Ṣaḍaraṅg', and his name was Niamat Khan. Tradition has it that he was a descendant of Tansen though there is some controversy about this view. He was attached to the court of Mohammed Shah Rangile (1719-48). To him goes the credit of evolving a new music form, the *khayāl*, the most popular music form today. Though *khayāls* were constructed on the groundwork of the *dhrupads*, they had a captivating beauty of their own. The lyrics of his *khayāls* and *dhamārs* were of a very high order. There are many songs one hears today credited to 'Ṣaḍaraṅg' of such mean lyrical quality

V.N. Bhatkhande: Hindustani Pioneer

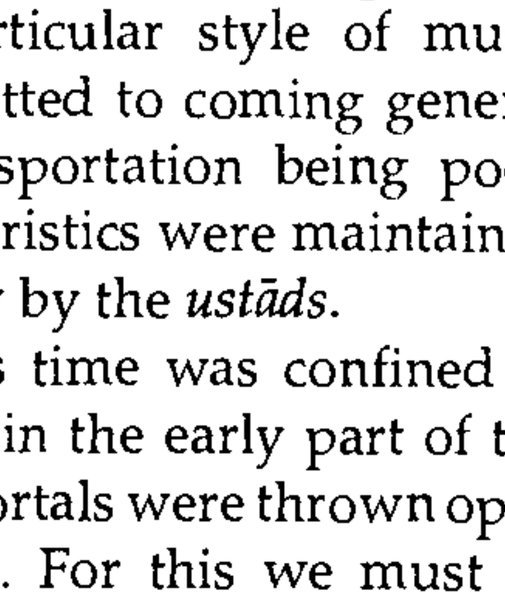


Ludwig van Beethoven:
The Doyen of Western Classical Music

that they can be brushed aside easily.

After the breakup of the Mughal empire, the court musicians became homeless, as it were. Many of them were welcomed in the native states under the British rule. They were accorded a royal welcome and an atmosphere where their creative faculties could flourish was created. This was the beginning of the *gharānā* system of music. In musical parlance *gharānā* means a particular style of music which can be transmitted to coming generations. Means of transportation being poor, these *gharānā* characteristics were maintained and guarded jealously by the *ustāds*.

Music up to this time was confined to small coteries. It was in the early part of the 20th century that its portals were thrown open to the general public. For this we must be grateful to two indefatigable crusaders—Pandits Vishnu Digambar Paluskar and Vishnu Narain Bhatkhande. They travelled all over the country, collecting compositions for posterity in notated form. We should mention here that musicologists of Bengal such as Soumendranath Tagore and Bishnupur *gharānā* musicians such as Gopeshwar Banerji compiled books with notated compositions. Unfortunately these books are out of print.



V.D. Paluskar

Up to 1947 there was not much change in the presentation of music. The only noticeable change was that instead of being confined to the houses of rajas, nawabs and petty zamindars musicians could now reach out to a larger public. True, the era of the music conference had begun; the first ever music conference was held in 1915 in Baroda, organized by V.N. Bhatkhande. Bengal had followed suit. The All-Bengal Music Conference became a regular affair. In Calcutta, Allahabad and other cities, young people got a chance to perform in public if they could score in music competitions held by the conference organizers.

Fiaz Khan

Music institutions had been established in various cities, again by the effort of V.D. Paluskar and V.N. Bhatkhande. Paluskar founded a college in Lahore in 1901, which was later shifted to Bombay. Now the Vishnu Digambar Colleges are flourishing in Pune and Delhi. Bhatkhande with the support of Thakur Nawab Ali founded the Marris College of Music in Lucknow, now Bhatkhande University.

After Independence events moved very fast. In the last 50 years a sea change has taken place. Schools and colleges of music have mushroomed everywhere. Music universities have come into being. The number of students is increasing day by day. Unfortunately, the quality of music and musicians is falling alarmingly.

The electronic explosion has brought such momentous changes that we are still being carried away by them. Tape-recorders, television sets and other devices can be had at affordable prices. No doubt they have great utility value, but the oral tradition (guru-śiṣya

Music Attracts a Hunter and a Traveller: Old Painting

paraṁparā) of our music has been badly hit.

There is a growing tendency for marketing, because success lies in one's ability for marketing one's merchandise. Why not art and music? Music is now a marketable commodity like any other consumer goods, no longer a quest or *sādhanā*. A phrase, 'audience demand', is often heard today. Has not this 'audience demand' been created by musicians themselves for quick gains?

The accent is now on excitement. Like instant coffee, and instant *masālā*, there is a craving for instant excitement. The emotive quality (*bhāva rasa*) is being jettisoned for the sake of *taiyārī* (speed). The *gharānās* are nearly extinct today. There has sprung up an eclectic form of music. We recall a few lines from Wordsworth's *Solitary Reaper*:

The music in my heart I bore
Long after it was heard no more.

Is there any trace of what we hear left with us once we leave the auditorium?

Even in the present fast-changing milieu the *guru-śiṣya* tradition with modifications could be of value in preserving what is best in our music. Here we come to an interesting question. If music is a commodity who are its consumers and purveyors?

The biggest consumers are the government and the corporate sector. The government after 1947 has spent much money and thought on the conservation and propagation of music. All India Radio has done yeoman work in this field; not so the television. The government-sponsored big events—*Apna Utsav* etc—and music festivals held all over the world at huge expense have not succeeded in engendering interest in our music comparable even to the individual contribution of a Ravi Shankar or Ali Akbar Khan. Government grants to musicians for disseminating our culture abroad have not yielded dividends. Going abroad has become a status symbol. A musician is now in a hurry to perform while the going is good. Patronage is important as of yore, only the sources have changed. Nepotism and tapping the right sources, one is sorry to say, are of more importance than slogging under *ustāds*. This being the craze in every field, how can musicians dissociate themselves from it?

The deterioration in the quality of our music in proportion to increase in quantity has been a cause of worry for serious listeners and musicians. There can be no two opinions about the fact that young music students today have enormous opportunities, provided by the state and corporate bodies. Bearing in mind Dr Johnson's letter to Lord Chesterfield, it can be said that a career in any art is no longer dependent on the whims of a rich patron. We must now think of ways and means of preserving the best of our tradition while moving with the times. We give a few proposals which might be of use in this respect:

(a) Government bodies such as Zonal Centres should induct performing musicians

Music Thrills a Nawab

Raga , an Artist's Conception

and musicologists into the governing bodies in larger numbers, especially for selectively providing grants to artistes and institutions.

(b) As music is a practical subject, the performance of music academies, colleges and universities should be judged not on the basis of voluminous inventories of their activities, but by the production of performers and musicologists like the *gāyaks* and *nāyaks* of old.

(c) Periodic tests by experts, unconnected with such institutions, should be introduced, on the merit of which the grants should be given. The syllabus should be scrutinized periodically.

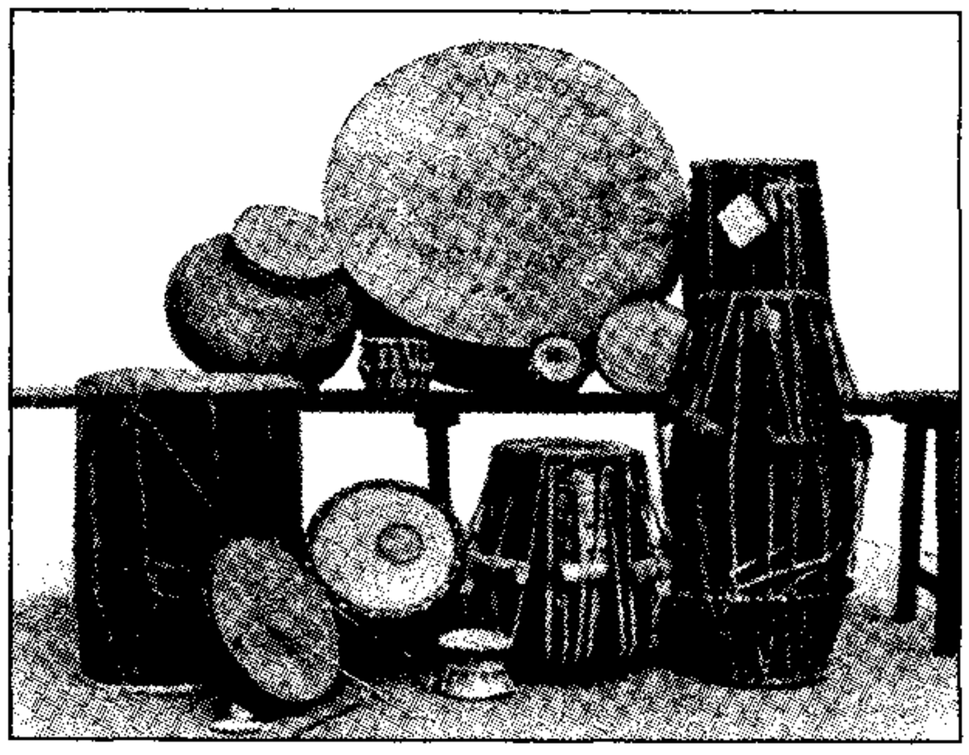
(d) Some check should be imposed on unauthorized music schools and colleges which are doling out certificates and diplomas of little or no value.

(e) Instead of holding big festivals and glittering functions comprising only artistes of 'star' value, the accent should be on regular functions where deserving musicians could participate.

(f) Music appreciation courses should be the order of the day. There are many listeners who love music. Their number would increase if they could be enlightened on the basis of *rāga* and *tāla*. Here I would strongly refute an argument put forward by some people that music does not require any explanation. 'He that has ears to hear,' they say, 'let him hear.' Classical music does require some degree of understanding to appreciate its subtleties; otherwise the accent will be on speed, on bouts between instrumentalists and percussionists as we see today, resulting not in music but in cacophony.

(g) Music education should start at the school level when the mind is most pliable. Simple nursery rhymes, short *sargams* (sol-fa syllables) and songs will, I am sure, if used intelligently, attract school-going children.

(h) Some check should be put on the fare that is being served on television. The Internet could be better utilized. The hybrid pop and dances telecast at all hours are the only means of entertainment of our little 'beasts of burden'—young children obsessed with examination and career!



A Few Famous Instruments of Classical Music

Swami Vivekananda put great stress on man-making education. In music, he recommended *dhrupad* with its virility, dignity and sublimity for the purpose.He abhorred sloppy emotionalism. 'Strength, strength, and more strength' was his motto. As Rabindranath Tagore said of the Swami, 'There is no weakness in him, only strength.'

Lastly, in the present trend for globalization, we would do well to remember Swamiji's advice, that we should take what is best in western civilization but not be just imitators. Similarly, we must sift the chaff from the grain of our own culture. ❑

Interreligious Understanding

Scope, Prospects and Proposals

FR MAXIMILIAN MIZZI, OFM CONV

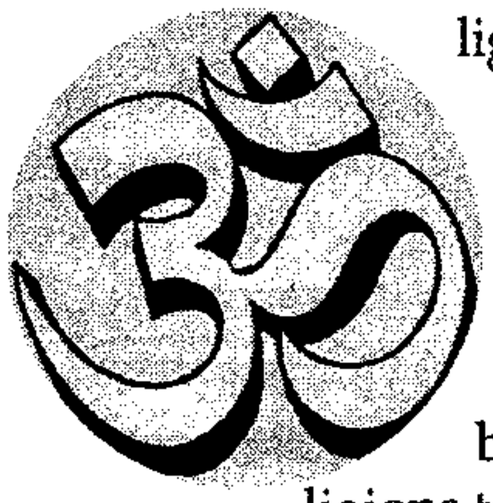
Fr Maximilian Mizzi is Director General for Ecumenism and Interreligious Dialogue, Assisi, Italy. It has been his endeavour to spread the message of religious harmony. Fr Mizzi travels extensively, giving talks in important conferences, and writes in various journals and periodicals, to make the world know the Catholic viewpoint of dialogue. Here are his valuable thoughts about the need of understanding between the different religions.

During these last years there has been so much talk about interreligious understanding, interreligious dialogue, and interreligious collaboration, which is very encouraging indeed. This is one of the 'signs of the times' as we, Christians, say when some new event comes on the horizon and there is a positive change of thinking and behaving. The world's religions during the past centuries have shared their own spirituality and culture with their own followers within their own boundaries. Each religious community lived more or less in isolation within its own tradition. Now the religions of the world are coming out of the ghetto to dialogue, to meet with each other, to understand each other better and to collaborate with each other for the common good of the human family. The negative aspects of the world's religions is being put aside. What is most important of all is that the leaders of the world's religions are coming together to spend moments of deep spirituality such as during meditation and prayer.

In the past centuries the followers of the world's religions knew little or nothing of interreligious dialogue. They were not used to meeting each other in order to find a solution to their problems. Very often the spiritual leaders of the world's religions either ignored each other or if they came together they met to dispute rather than to dialogue with each other. Sometimes they simply came into conflict with each other.

Today there is a greater maturity among the world's religious leaders. The mass media has brought the nations of the world closer to each other. The people are getting to know each other better and the barriers of misunderstanding are coming down.

I think that the Catholic Church has been very instrumental in pulling down the barriers between the world's religions during these last few decades. For those who are members of the Catholic Church this change of mind and opening of the heart towards the other religions came with the Second Vatican Council (1962-65). Some documents of the Vatican Council, particularly the one known as *Nostra Aetate* ('In our times') and others issued by Pope John Paul II, stress the need for the Catholic Church to better its relations with the other religions. In 1986 Pope John Paul II invited the world's religions to Assisi, the little town of St Francis, to pray for world peace. That event was called the World Day of Prayer for Peace and gave a new impetus to interre-



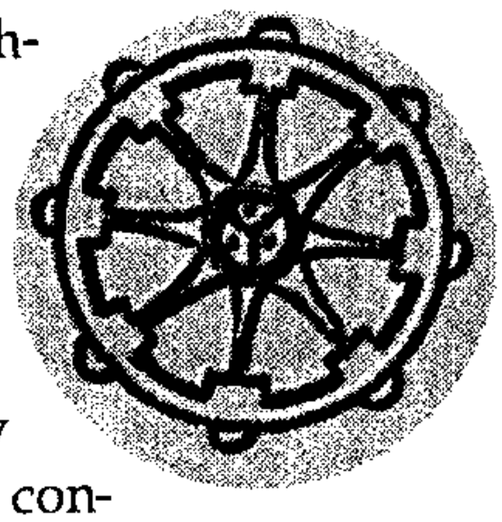
ligious dialogue.

I have no doubt though that interreligious dialogue is one of the main factors in this process, which is bringing the world's religions together in all respect and understanding.

The scope of interreligious dialogue is to bring people from different religions, traditions and cultures together to talk with each other. By talking with each other they get to know each other and by doing so they understand each other better. Mutual understanding is the key to respect and love. You will never respect a person if you don't understand that person, and you will never understand that person if you don't talk with that person. Without mutual understanding between the world's religions there will be little or no respect for one another and if there is no respect there will be no peace and harmony between the followers of the religions of the world.

Interreligious dialogue is not meant to *convert* the other to your own faith or to your own religious tradition. It is not a way to proselytise or to win the other to your faith. Interreligious dialogue is meant to better understand the *other's* spiritual tradition and spirituality and to help the *other* to better understand your own spiritual tradition. Interreligious understanding helps the parties involved to discover and to appreciate the great richness, which is behind every religious spirituality and tradition.

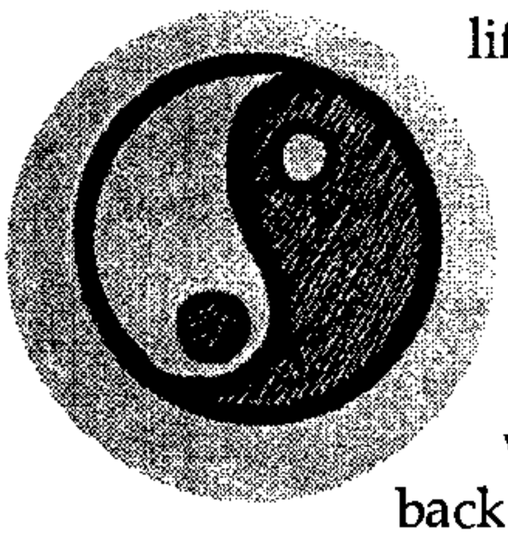
Another scope of interreligious understanding is to have a more objective view of the world's religions. There have been, and unfortunately still are, many prejudices regarding the religious traditions. Prejudices undermine peace and harmony and keep millions of people from all over the world in darkness. Many people still believe that the only religion which is good is their own religion. Reading some documents of the Catholic Church that were published after the Second Vatican Council and some of the documents issued by Pope John Paul II, I was glad to read that 'there is only one community and it consists of all peoples.' That 'they have only one origin, since God inhabited the entire world with the whole human race. That they have one ultimate destiny, God, whose providence, goodness, and plan for salvation extends to all' (*Nostra Aetate*, 1, in *John Paul II Crossing the Threshold of Hope*, p. 78). Even though the Catholic Church believes that Jesus Christ is the truth, the way and the life, '...it rejects nothing that is true and holy in other religions' (*Nostra Aetate*, 2).



In this light I have no doubt that understanding of, and between, the religions of the world is of utmost importance in order to create an atmosphere of peace and harmony among them. If there is peace and harmony between the religions there will be an end to many conflicts which stem from a religious background. Furthermore, interreligious understanding is a way to collaboration between the world's religions and a way to sharing the great spiritual heritage which is inherent in all the world's religions.

I have been very lucky during these last decades to have had the opportunity to participate in many interreligious meetings and conferences in many parts of the world. Great spiritual leaders (John Paul II, the Dalai Lama, etc) have tried to give their precious contribution to find peaceful solutions to the problems of the world, to speak on behalf of millions of people who are victims of wars and conflicts, to protect women and children from violence and abuse, to help safeguard God's creation.

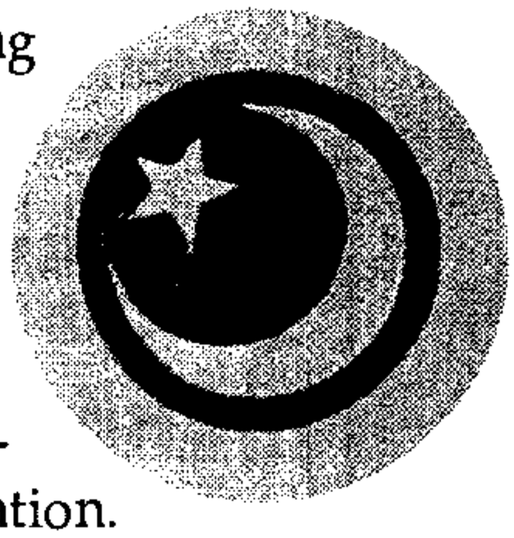
And here comes another aspect of the role of interreligious understanding, namely that of collaboration between the religions to help overcome one's own problems and the problems of the world and also to better the



life of the human family. First of all by means of interreligious understanding the world's religions will be able to avoid those conflicts which have a religious background. Ethnic conflicts and even bloody wars with a religious background were not rare in the past and, unfortunately, also in recent times such as in Northern Ireland, the former Yugoslavia, Israel and other countries. I don't believe that religion is the cause of war and conflicts. But I do believe that many conflicts have a religious background or, which is even worse, the moral and physical support and encouragement of religious leaders. Religion is sacred. No religious or political leader or any other person has the right to make use of religion for poltical or nationalistic purposes. This goes against the fundamental principles of religion.

In order to contribute to world peace and harmony the world's religions are called to come out of isolation. *No man is an island*. They are called to face the world problems with a sense of responsibility and dignity. Religions today have a great mission in this regard. They are called to come out, together, in all understanding and harmony in order to give their share of spirituality, wisdom, compassion, understanding and forgiveness in order to be living witnesses of harmony, peace and universal brotherhood and sisterhood to the whole world. It is only by giving such a witness that the world's spiritual leaders will be trusted and respected. We have known or read about great spiritual leaders and apostles of love, peace and non-violence like St Francis of Assisi, Mahatma Gandhi, and others. Their way of living is a living example to all the peoples on earth.

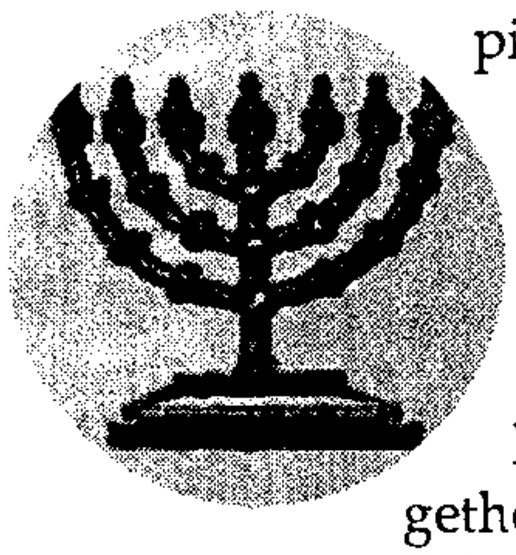
The prospects today of a deeper understanding between the world's religions are very promising. From my own experience I have noticed that there is a great effort on the part of the spiritual leaders all over the world



to promote understanding and collaboration between the religions. We must not underestimate their good will and their hard work to achieve such an understanding and collaboration. Interreligious dialogue, international and local meetings between the representatives of religions are something which is relatively new. Such meetings, with a few exceptions, have started to take place only a few decades ago. Now they are being held on a large scale, in every part of the world. This new spirit is spreading like wildfire and I hope that it won't stop. And I am sure that no one is going to stop this process. It is irreversible.

The last century is known for too many wars, armed conflicts, ethnic cleansing and genocide. People are looking to the new millennium with great expectations. They hope that the tragedies of the last century will not be repeated. Religions can play an important role in creating a new era if only they try to do their best not to repeat the mistakes of the past. This is done by means of dialogue, which leads to a better understanding. The many meetings between the representatives of religions in many parts of the world have opened a new horizon. Technology, industry and the welfare state offer a better standard of living. But this is not enough. The world today needs something deeper. And this is spirituality. Without spirituality we will be victims of materialism which is corroding the basis of the human society.

Another good prospect is that many people in many parts of the world are showing signs of a greater need for a deeper spiritual life, for prayer and meditation. People of different faiths have come to realize that in every religion there is so much that is good and holy. The world's religions have been described as different gardens with all sorts of flowers. People who follow a particular religion have started to go from one garden to another and



pick the most beautiful ones.

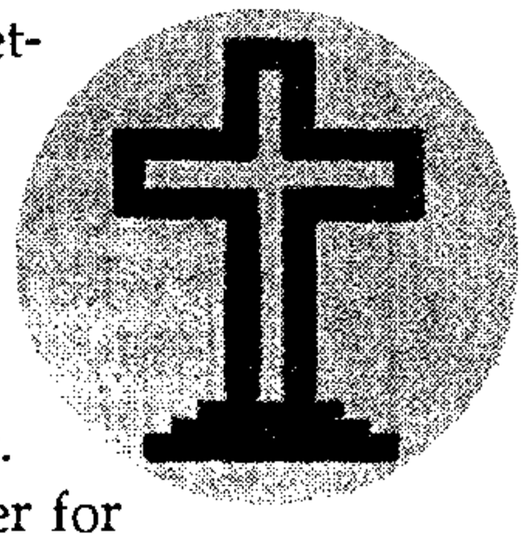
We are only at the very beginning of a new era. The fact that the world's religions have started to come together to dialogue, to find new ways of collaboration and to share with each other their spiritual heritage, is leading the religions of the world to a better mutual understanding. It is a good beginning.

My suggestion for a better understanding between the world's religious leaders is that they must be *convinced that religions can do a great deal to help create a new era.* These leaders must know that they can give a very-positive contribution in this regard. They have a sacred calling to help renew the world.

Their mission is mainly spiritual, that is to lead their followers to holiness. But at the same time they must not neglect the social needs of the human family.

Another proposal is that in order to give their contribution to solve the world's problems, every religion is called to come out into the open and meet with other religions in dialogue and mutual understanding. By means of mutual respect and collaboration they will be able to build bridges of mutual respect rather than create barriers of misunderstanding, hatred and violence.

I also propose that interreligious meetings be held both on an international level and local levels. These meetings will offer the representatives of religions good opportunities to get to know each other better and to understand each other better.



The World Day of Prayer for Peace in Assisi, Italy, in 1986, the Parliament of the World's Religions in Chicago, USA, in 1993 and the other one in Cape Town, South Africa, in 1999, the World Conference on Religions and Peace in Amman, Jordan, in 1999, and the World Peace Summit in the United Nations last September, are good examples to follow. We should also give space to *small interreligious meetings*, which can be organized for people on a grass roots level.

I have started a campaign proposing to the schools to dedicate a day each year to interreligious dialogue and understanding. In this way the children will get to learn about the different religions and cultures and appreciate them. Furthermore, I am making a campaign so that courses on interreligious dialogue and mutual understanding be included in the curriculum of the world's universities.

I think that the time is ripe enough for the world's religions to give their precious contribution to promote a deep spiritual atmosphere, mutual understanding, peace and harmony, social justice, non-violence and a greater respect for the whole of creation. ❑

The Language of Harmony

The language of the soul is one, the languages of nations are many; their customs and methods of life are widely different. Religion is of the soul and finds expression through various nations, languages, and customs. Hence it follows that the difference between the religions of the world is one of expression and not of substance; and their points of similarity and unity are of the soul, are intrinsic, as the language of the soul is one, in whatever peoples and under whatever circumstances it manifests itself. The same sweet harmony is vibrant there also, as it is on many and diverse instruments.

—Swami Vivekananda

THE HINDU PERSPECTIVE

DR SIBAJIBAN BHATTACHARYA

Dr Sibajiban Bhattacharya is a well-known philosopher. He chairs the department of Indology at the Ramakrishna Mission Institute of Culture, Calcutta. He has many works to his credit. Dr Bhattacharya sent us this paper at an extremely short notice, and we thank him for the same. We also thank Sri D.K. Dasgupta, Calcutta, for helping us get this article. We publish a pictorial homage to some philosophers, who are the greatest benefactors of humanity.

Introduction

There is an initial terminological difficulty. It is because 'Hindu' is not a word of classical Sanskrit. Monier-Williams, in his *Sanskrit-English Dictionary*, derives the word 'Hindu' from a Persian word. He gives two examples of compound terms: *hindūsthāna* and *hindū-dharma*. 'Hindūsthāna' means 'the country of the Hindus' (properly restricted to the upper provinces between Banaras and Sutlej). In the tradition, however, Gandhari, who was a native of what is now Afghanistan, is a central figure of the *Mahābhārata*. The second compound term 'Hindū-dharma', according to Monier-Williams, means 'the Hindu religion'. This is also not correct because the Sanskrit word *dharma* does not have exactly the same meaning as the word 'religion' in English lexicon. For one thing, *dharma* pervades the entire life of an individual from the time of his conception to death. *Dharma* determines all conceivable human activities, say, the time and posture of going to bed, the hour of rising, the food to be taken, etc, as also the object, mode and time of worship, meditation, or other spiritual practices. *Dharma* also includes ethical principles like speaking the truth, non-violence, etc. Moreover, *dharma*, unlike religion, is not institutionalised. The priests, sages and saints do not have the same function in the Hindu society as the pope, archbishops, bishops and so on in the Christian society.

The Ideal of Interreligious Understanding: A Painting from Sri Ramakrishna's Time: Sri Ramakrishna saw it too

Religion Based on Philosophy

Indian religions are based upon philosophical systems. In India philosophical speculation on the ultimate nature of truth and also the practical method of realizing this truth are equally important. Philosophy is never

Sage Kapila: Sāṁkhya Patriarch

conceived as a merely theoretical exercise for the sake of conceptual clarity; all systems of Indian philosophy have a practical aim to achieve. This practical aim is not meant for any particular class. The practical aim initially was to find a way out of death; later, of all suffering. In a form of Buddhism all life is identified with suffering. In *Māṭhara Vṛtti*, it is propounded that the realization that life is suffering leads to questions about its remedy. The very concept of liberation implies cessation of all sorrows for all time to come.

Apart from this practical aspect meant for man in general, all Indian philosophies accept certain beliefs regarding human existence, which are not found in any non-Indian philosophy. These are: (a) Acceptance of the law of *karma* as the morally and causally determining principle of the individual's birth, life-span and the quality of life as pleasant or painful (*jātyāyurbhogāḥ*); (b) Belief in a cycle of births and deaths of an individual; (c) Conception of release or liberation as the permanent state of freedom from the cycle of births and deaths.

Śrī Kṛṣṇa: The First Harmonizer

It is necessary to determine the meaning of the term 'Indian philosophy'. To begin with, Indian philosophy may be characterised as philosophy developed within the geographical limits of the Indian subcontinent, which was divided very often into many kingdoms and states. We shall confine our discussions to classical philosophical systems, and shall not consider Indian contributions to Islamic or Christian philosophies, nor the philosophical elements as are found in the folklore of different parts of India.

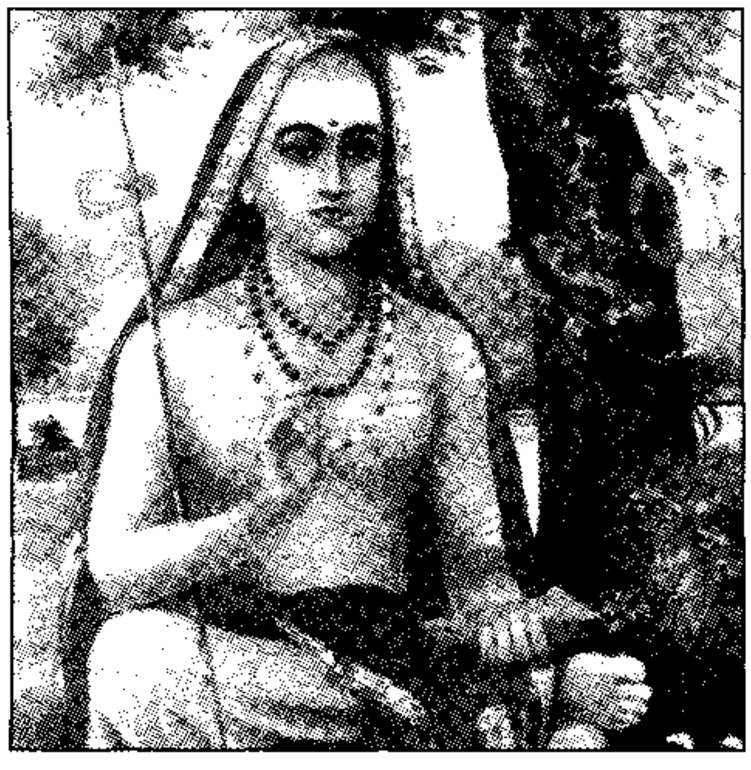
Traditionally, the classical systems of Indian philosophy have been classified into *āstika* and *nāstika* schools—the *āstika* schools accept the authority of the Vedas, while *nāstika* schools are those that arose out of protest movements against the Vedic culture. Thus all schools of classical philosophy are oriented to the Vedas, either positively or negatively. We shall, therefore, begin our discussion with a brief outline of the conditions under which the Vedas, specially *Ṛg Veda*, developed, the problems faced and the solutions arrived at.

Vedic Religion

The *Ṛg Veda Saṁhitā* is a collection of 1028 hymns, arranged in a particular way in 10 *maṇḍalas*, contributed by about 400 inspired seers or poets, 11 of whom were kings and more than 20 were women. From this structure of the *Ṛg Veda* it is seen that the seers did not belong to any particular class—priestly or otherwise, rich or poor. They had, of course, to be seers; anyone having the requisite qualifications of introspection and clear diction could be a seer. The openness of the venerable order of seers deserves special mention.

Now coming to the theme of the *Ṛg Veda*, it is a story of continuous struggle of people, perhaps of two races—the *dāsas* or *dasyus* (10.49.3) and *seinyus* or *rākṣasas* — of different beliefs, world-views, rituals and lifestyles. There are references to people who did not believe in private

Sage Patañjali: Yoga Patriarch



Śaṁkara: Advaitin

property, and hence did not consider stealing or looting a sin (10.108). The major problem of the *Ṛg Veda* was, therefore, to permanently resolve the strife amongst the warring groups of people. We shall presently explain the nature of this solution, but it is to be noted that by the time the *Ṛg Veda* era ended the strife in that form was by and large resolved.

Initially, though the struggle was between races, it gradually developed into the struggle for cultural domination and, later, of unification. Indra, who killed the *dāsas* (slayer of Vṛtra) later killed two Aryan kings Arṇa and Citraratha (4.3.18). Thus Indra was the destroyer of both Aryan and non-Aryan people who did not believe in his supreme authority and in offering sacrifices to him. This cultural domination by might was later replaced by a sense of justice to all—believers and non-believers alike: 'Celebrate expiatory sacrifice for the good of man' (7.34.6).

This concept of doing good to everyone was later enlarged by the mystic experience of the unity of all, that is, the living and non-living, human and non-human. First, Indra himself was conceived as possessing Self-knowledge (the Ṛg Vedic sage Gouriviti in 10.73.10 says that none save Indra 'knows whence he was born'). But at a more fundamental level, a more enduring unity was found. Indra, Mitra, Varuṇa, etc are only different names of one Reality. Moreover, the rituals were replaced by the knowledge of this all-comprehensive unity. 'The letters of the *ṛks* are in the highest heaven where all the gods reside. What will he do with the *ṛks* who does not know this? Those who know this attain happiness' (1.169.39). It is this overwhelming experience of the all-comprehensive unity that finally resolved all conflicts present in pluralism.

Search for Reconciliation

This search for unity to reconcile conflicting philosophical theories, after it had been developed, continued throughout the history of Indian philosophy. Advaita Vedānta continued the Vedic tradition of direct experience of an all-comprehensive oneness in the midst of plurality. But the Vedic schools developed other methods of solution over the years.

1. The different systems were shown to be not mutually opposing to one another but as complementary conceptual systems. Thus there could be a synthesis of different schools of philosophy and their lifestyles (*samuccayavāda*).
2. The second form of the solution involved working out a hierarchy of the systems, the most popular being that with Advaita Vedānta at the top and the other systems coming below in a descending order.
3. The third form of solution was to show that all systems led to the same goal, only through different ways to suit individual differences in intellectual and moral preferences.

But this Vedic approach, in none of its forms, involved working out a different type of logic or ontology; all it required to do was to re-interpret the philosophical systems from a meta-philosophical point of view. There is again another limitation of this approach. Although all systems following the Vedic tradition stated, examined and refuted Jaina and Buddhist theories, in resolving the meta-philosophical problems they totally ignored these non-Vedic schools. Yet they need not have done so. For exam-

Rāmānuja: Viśiṣṭādvaitin

Madhva: Dvaitin

ple, in the form (a) of the Vedic solution, referred to above, Vedic philosophers classified the different philosophical systems from the meta-philoso phical point of view by the ways (*mārgas*) of thinking and living: (a) A way of knowledge (Advaita Vedānta, Sāṁkhya and Nyāya); (b) A way of faith (Vaiṣṇava, Pāśupata), and (c) A way of action (Yoga, Pūrva Mīmāṁsā).

Oneness in the Midst of Many

The solution of the meta-philosophical problem was found in the possibility to include in this solution the Jaina and the Buddhist philosophies too, by adding, if necessary some more 'ways'.

In spite of all these limitations, the Vedic approach to conceptual pluralism successfully resolved all contradictions in lifestyles arising from conflicting sets of beliefs and dogmas. We shall try to give a brief overview of the practical aspects of the Indian philosophical theories. It is often held that classical Sāṁkhya philosophy is atheistic, maintaining that the existence of God cannot be proved for lack of evidence. Yet in the Indian tradition Sāṁkhya is regarded as one of the ways of achieving the same goal achieved through other methods. We find in the *Śiva-mahimna-stotra* (*śloka 7*): 'There are different paths (of realization) as enjoined by the three Vedas, Sāṁkhya, Yoga, Pāśupata and Vaiṣṇava philosophies. Persons following different paths—straight or crooked—according as they consider that this path is the best or that one is proper, due to difference in temperaments, reach Thee alone just as rivers enter the ocean.'[1]

It is said that these different paths are recommended for persons with different tastes (*rucīnāṁ vaicitryāt*). This point of view has been emphasised by Sri Ramakrishna's teaching: 'As many faiths, so many paths.' In Panchanana Tarkaratna's *Śakti Bhāṣya*, an attempt has been made to reconcile the conflicting philosophical theories, specially Pūrva Mīmāṁsā and Advaita Vedānta, by his doctrine of *adhikāri-bheda*. This is sought to provide a clarification to 'difference in tastes' in the above *stotra*. Prof K.C. Bhattacharya in his theory of alternative forms of the Absolute has developed a very novel conceptual scheme for resolving conflicts amongst rival philosophical schools. Thus in the philosophical tradition of Vedānta philosophy there has been a dominant trend of synthesis of conflicting theories and lifestyles throughout the ages.

There is another aspect of Advaita Vedānta theory that all resolves all conflicts—social, economic and cultural. This is the emphasis it lays on the concept of *krama-mukti*, the eventual liberation of all living beings, human and non-human. In Sri Aurobindo's philosophy the liberation of all living creatures is integrated into the very concept of liberation. No one can be liberated unless all are. The necessity of liberating all men irrespective of caste, creed, nationality and sex, the promise of inevitable divine life on earth, reveals the oneness of all men. Mahamahopadhyaya Gopinath Kaviraj too has a concept of *akhaṇḍa-mahā-yoga* (as distinct from yoga) that envisages liberation for all, while yoga is the method of attaining personal liberation.

Vallabha: Puṣṭi Mārgin

We feel that Swami Vivekananda has provided the best solu-

1. *Śiva-mahimnaḥ Stotram*, trans. Swami Pavitrananda (Calcutta: Advaita Ashrama, 1987), p. 16.

tion in the matter of reconciliation of various religions through his conception of Universal Religion. But before directly going into that let us have a brief idea of his theory of religion and its nature, through what he himself has said.

Vivekananda's Theory of Religion

According to Vivekananda there is a fundamental difference between Vedānta and other religions. He says:

> You all know that certain things are necessary to make religion. First of all, there is the book. ... The second requisite, to make a religion, is veneration for some person. He is worshipped either as the Lord of the world or as the great Teacher. ... The third requisite seems to be that a religion, to be strong and sure of itself, must believe that it alone is the truth; otherwise it cannot influence people.[2]
>
> Vedanta does not believe in any of these teachings. First, it does not believe in a book.... It denies the authority of any book over any other book. It denies emphatically that any one book can contain all the truths about God, soul, the ultimate reality. Those of you who have read the Upanishads remember that they say again and again, 'Not by reading of books can we realise the Self'.
>
> Second, it finds veneration from some particular person still more difficult to uphold. ...this is the only religion that does not cling to any person. A man is no more worthy of worship than any bird, any worm. ... No book, no man to worship, nothing. ... A still greater difficulty is about God. ...God is not the monarch sitting on a throne, entirely apart. ... You are all Gods. One God is not sufficient. ... No God to be afraid of. ... No book, no person, no Personal God. All these must go. Again the senses must go. We cannot be bound to the senses.[3]

Swamiji emphasizes that religion is wholly rational when properly understood. It is often held that religion is revealed to a prophet, and revelation is often regarded as superior to secular knowledge. This has led to conflict between religion and secular knowledge. Moreover, different religions claim to be based on revelation. This leads to the problem of deciding which of the conflicting revelations is true—Christian or Mohammedan, or the like. How can the conflict between revealed religions be resolved? Vivekananda says,

> Certainly not by the books, because the books, fighting between themselves, cannot be the judges. Decidedly then we have to admit there is something more universal than these books, something higher than all the ethical codes that are in the world, something which can judge between the strength of inspirations of different nations. ...it is evident that here we appeal to reason. Now, the question arises if this light of reason is able to judge between inspiration and inspiration....[4]

Swamiji gives the highest authority to reason as a source of all religious knowledge. Even the Vedas must be tested by reason. Says he:

> Personally, I take as much of the Vedas as agree with reason. Parts of the Vedas are apparently contradictory. They are not considered inspired in the Western sense of the word, but as sum total of the knowledge of God, omniscience, which we possess. But to say that only those books which we call Vedas contain this knowledge is mere sophistry. We know it is shared in varying degrees by the scriptures of all the sects. Manu says, that part of the Vedas which agrees with reason is the Vedas....[5]

Having learnt Vivekananda's theory of religion, let us now address the more important question—what does he perceive as the true nature of religion? Says he:

> The ultimate goal of all mankind, the aim and end of all religions, is but one—re-union with God, or, what amounts to the same, with

---

2. Swami Vivekananda, *The Complete Works* (Calcutta: Advaita Ashrama, 1989), Vol. 8, pp. 122-3. [Hereafter, *Complete Works*.]
3. *Complete Works*, Vol. 8, pp. 124-7.
4. *Complete Works*, Vol. 1, pp. 368-9.
5. *Complete Works*, Vol. 8, p. 255.

The First Hindu Temple in USA: Vedanta Temple

> the divinity which is every man's true nature. But while the aim is one, the method of attaining may vary with the different temperaments of men.[6]

But to him the essence of religion *lies in being and becoming*:

> Religion is realization; not talk, nor doctrine, nor theories, however beautiful they may be. It is being and becoming, not hearing or acknowledging; it is the whole soul becoming changed into what it believes. That is religion.[7]

Universal Religion

Vivekananda's concept of 'Universal Religion' follows in logical sequence of his theory of religion and its nature. It does not contradict any of the existing religions, not has it sublated any of them. In a sense it transcends all of them. According to him,

> Unity in variety is the plan of the universe. We are all men, yet we are all distinct from one another. ...universal existence is God, the ultimate unity in the universe. In Him we are all one. At the same time, in manifestation, these differences must always remain.[8]
>
> Just as we have recognised unity by our very nature, so we must also recognise variation. We must learn that truth may be expressed in a hundred thousand ways, and that each of these ways is true as it goes. ... So far it is all right theoretically. But is there any way of practically working out this harmony in religions?[9]

From the plane of theory he gets down and puts forward his plan of action: 'I have also my little plan. ...I would ask mankind to recognise the maxim, "Do not destroy."... Do not injure, if you cannot render help. ... Secondly, take man where he stands, and from there give him a lift. If it be true that God is the centre of all religions, and that each of us is moving towards Him along one of these radii, then it is certain that all of us *must* reach that centre. And at the centre, where all the radii meet, all our differences will cease; but until we reach there, differences there must be.'[10]

'What I want to propagate is a religion that will be equally acceptable to all minds; it must be equally philosophic, equally emotional, equally mystic, and equally conducive to action.'[11] This practical religion is yoga, which has four forms: Karma yoga, Bhakti yoga, Rāja yoga and Jñāna yoga. 'No one of these yogas gives up reason, no one of them asks you to be hoodwinked, or to deliver your reason into the hands of priests of any type whatsoever. No one of them asks that you should give your allegiance to any superhuman messenger.'[12]

'Lastly, it is imperative that all these various yogas should be carried out in practice; mere theories about them will not do any good.'[13]

We cannot conceive of any nobler or effective scheme of work in creating an ambience of mutual understanding in between different religions than what is laid down by Swami Vivekananda. He does not limit himself in providing a philosophical foundation acceptable to people irrespective of their colour, creed, nationality and sex; he has indeed put them to practice with remarkable success.

---

6. *Complete Works*, Vol. 5, p. 292.
7. *Complete Works*, Vol. 2, p. 396.
8. *Complete Works*, Vol. 2, p. 381.
9. *Complete Works*, Vol. 2, pp. 382-4.
10. *Complete Works*, Vol. 2, pp. 384-5.
11. *Complete Works*, Vol. 2, p. 387.
12. *Complete Works*, Vol. 2, pp. 388-9.
13. *Complete Works*, Vol. 2, p. 396.

THE CHRISTIAN PERSPECTIVE

REV CANON CHARLES P. GIBBS

The Reverend Canon Charles P. Gibbs is Executive Director, United Religions Initiative, San Francisco, USA. *In this article, Rev Gibbs presents the Christian view of interreligious understanding in a brilliant way—vitally necessary in this strife-torn world.*

Over the centuries, the world's religions, spiritual expressions, and indigenous traditions have received incomparable treasures of wisdom and guidance toward peace, justice, healing and the fullness of life. Tragically, each day these treasures are desecrated by acts of hatred and violence. This desecration helped make the 20th century the bloodiest in human history.

Jesus Christ

It is time to change the course of human history by acting to reclaim, cleanse and renew those gifts. It is time for all people of all faiths to join hands so that together we might build the better world we all yearn to live in, to see children grow up in and elders grow old in. But how is this change possible? I seek to answer that question from two perspectives: first, from that of an Episcopal (Anglican) priest; second, from that of the Executive Director of the United Religions Initiative.

My answer as an Episcopal priest begins in the religion that is my spiritual home—Christianity. It begins with a confession, which I share with countless Christians around the world, of profound regret at the role Christianity has played in acts of hatred, violence and oppression throughout history. It begins with a deep desire for religious amendment of life so that the incomparable gifts Christianity has offered to enrich countless lives might be offered humbly, openly, in a manner respectful of difference, and free from coercion and violence in service of a better life for all.

To lay the foundation for such a renewal and amendment of life within Christianity, I begin, not surprisingly, with Jesus. From his Jewish roots, Jesus taught that each person—female and male, Jew and Gentile, young and old, rich and poor—is infinitely precious, of incomparable value, in the eyes of a loving God, who wishes for each person the fullness of life. As the clearest path to fullness of life, Jesus presented his summary of the Jewish law: love God with all your being, and love your neighbour as you love yourself. This elegantly simple, yet extraordinarily complex commandment provides the foundation for interreligious respect, understanding and cooperative positive action.

As Christians, in order to reach a meaningful understanding of what is being asked when we are asked to love our neighbour, we have to begin with what is being asked when we are asked to love God. What is the God we are called to love like? How are we called to express our love for God? Through his life and teaching, Jesus revealed that God is limitless

St Ambrose, the Organizer

love. He taught that God's forgiveness is an expression of this boundless love. God's love is offered freely, abundantly, indiscriminately. God's love is a powerful force for healing. God's love is expressed in a passion for peace and justice, in caring for the poor and vulnerable. In the all-encompassing love of God there are no outcasts. We are asked to see that all are one in the love of God, in the God who is love. Implicit in this call to recognize the fundamental unity of all people is a call to work for the unity in diversity of all religions, spiritual expressions and indigenous traditions as distinct flowers in the glorious bouquet of God's overflowing love.

Having said that, I must acknowledge that, throughout the centuries, in seeking to love God and express the unity that is in God, many Christians have not honoured the distinctness and validity of other religions, but have sought to make the whole world Christian. I confess that a tremendous amount of violence has been visited on the world by Christians aflame with the conviction that the only path to salvation is through proclaiming that Jesus Christ is Lord and Saviour of all, and that it is the responsibility of Christians to make Christians of all people. I profoundly regret that violence and the exclusivist theology which fuelled it, and I believe that Christianity must move beyond it. In that light, I offer an alternative view of what it means to love God and seek unity. This view comes from a teaching of Jesus about how, at the end of time, people will be judged righteous. Jesus told the following story:

> On the day of judgement the King will come on clouds with his angels, and he will divide the nations as a shepherd divides the sheep from the goats, with the sheep on his right hand and the goats on his left.
>
> And to those on his right hand he will say, 'Go to the paradise prepared for you from the foundation of the world, because I was hungry and you fed me, I was naked and you clothed me, I was sick and you ministered to me, I was in prison and you visited me.'
>
> And the righteous will ask him, 'Lord, when did we see you hungry and feed you, or naked and clothe you, or sick and minister to you, or in prison and visit you?'
>
> And he will answer them, 'Behold, whenever you did this to the least of my neighbours, you did it to me.'
>
> —*Matthew, 25: 31-40*

In this story of the last day, the standard of righteousness, the key to salvation is not belonging to a particular religion. It is not proclaiming Jesus Christ as Lord and Saviour. It is doing works that bear the fruit of love. It is living a life dedicated to loving God with all our being, an active love that is expressed in loving our neighbour as we love ourselves.

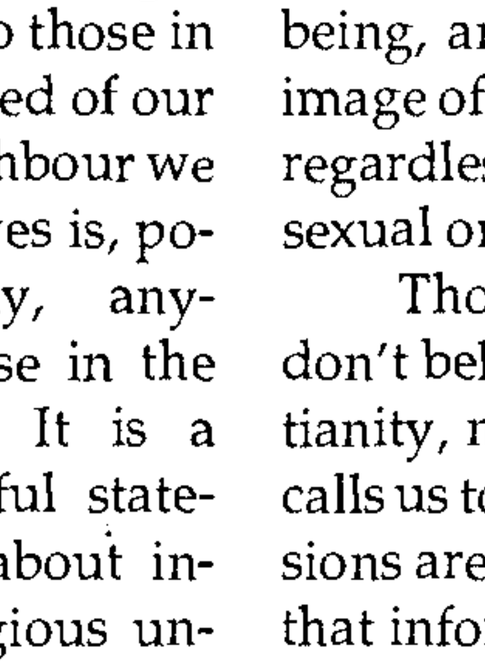
I want to stress a part of this teaching that was not often stressed when I was growing up—that we are to love ourselves. If, as we are taught, God loves us, how can we not love ourselves? If, as we are taught, we (and here 'we' refers, not to any particular group of people, but to all of humanity), are made in the image and likeness of God, how can we not love ourselves? And if we love ourselves, how can we not choose the fullness of life that comes from returning God's love by loving God with all our being, and by loving our neighbour as ourselves?

St Augustine, the Theologian

So we come to loving our neigh-

bour. But, who, you might ask, is my neighbour? Is it only people like me? People of my age, gender, socio-economic class, religion, or national origin? When asked that question by a young person, Jesus answered with this story:

> A certain man went down from Jerusalem to Jericho. On the way he was overwhelmed by robbers, who beat him and robbed him and left him for dead in the ditch. A religious leader walking down the road saw the beaten man in the ditch. He passed by on the other side of the road. A second religious leader did the same. Then came a Samaritan, an outsider, a person to be avoided at all cost. The Samaritan didn't pass by. He stopped, knelt down in the ditch, and cared for the wounded person. He bound his wounds, put him on his donkey, and took him to a nearby inn. Leaving some money with the innkeeper, he said, 'Take care of him, and if it costs more than this, I will pay you when I return.'
>
> After telling this story, Jesus asked the young person who had questioned him, 'Which of these three do you think was the neighbour to the one who lay dying in the ditch?' The young person answered, 'The one who showed compassion.' Jesus replied, 'Go and do likewise.'
>
> —*Luke, 10:25-37*



St Ignatius Loyola

So, according to Jesus, we are neighbourly when we show compassion to those in need. Our neighbour is anyone in need of our compassion. In other words, the neighbour we are called to love as we love ourselves is, potentially, anyone else in the world. It is a powerful statement about interreligious understanding and cooperation that Christians are called to regard all people as our neighbours and to love them as we love ourselves.

St Theresa of Avila, the Nun

St Francis of Assisi, the Monk

On top of this, it is astonishing to realize that in this story the model of neighbourliness, of righteousness, was not someone of Jesus' own religion. It was not a fellow Jew. The model of neighbourliness was a stranger, an outsider, a Samaritan. If a contemporary 'Christian' Jesus were to tell this same story, he might well tell the story of the good Buddhist, or the good Hindu, or the good Muslim.

In this call to honour, respect and learn from the other lies a foundation for interreligious understanding for Christians. Appropriately, this command to Christians to love God with all our being and to love our neighbours as we love ourselves comes from the heart of Judaism. It is a command that calls us to live in an abiding, transforming awareness of God's impossibly extravagant love for all God's children, of the image of God that resides in each and every human being, and of the call to seek and serve that image of God in each and every human being, regardless of race or class or age or gender or sexual orientation or religion.

Though the expression is Christian, I don't believe that message is unique to Christianity, nor is the vision of the better world it calls us to give our lives to build. Those expressions are found in all traditions. It is this belief that informs the work of the United Religions Initiative, which seeks to be a global agent of interreligious cooperation. The Preamble to the URI Charter expresses this conviction:

> We, people of diverse religions, spiritual expressions and indigenous traditions through-

Martin Luther, the Reformer

out the world, hereby establish the United Religions Initiative to promote enduring, daily interfaith cooperation, to end religiously motivated violence and to create cultures of peace, justice and healing for the earth and all living beings.

We respect the uniqueness of each tradition, and differences of practice or belief.

We value voices that respect others, and believe that sharing our values and wisdom can lead us to act for the good of all.

We believe that our religions, spiritual lives, rather than dividing us, guide us to build community and respect for one another.

Therefore, as interdependent people rooted in our traditions, we now unite for the benefit of our Earth community.

We unite to build cultures of peace and justice.

We unite to heal and protect the Earth.

We unite to build safe places for conflict resolution and healing.

We unite to support freedom of religion and spiritual expression, and the rights of all individuals and peoples as set forth in international law.

We unite in responsible cooperative action to bring the wisdom and values of our religions, spiritual expressions and indigenous traditions to bear on the economic, environmental, political and social challenges facing our earth community.

We unite to provide a global opportunity for participation by all people, especially by those whose voices are not often heard.

We unite to celebrate the joy of blessings and the light of wisdom in both movement and stillness.

We unite to use our combined resources only for non-violent, compassionate action, to awaken to our deepest truths and to manifest love among all life in our Earth community.

The United Religions Initiative is a growing global community of people who believe that now is the time to deepen our active commitment to reclaim, cleanse, and renew the gifts of our various traditions, and to offer those gifts in the service of all life. It is a growing global community of people dedicating their lives to making that belief a reality. I pray that the Christian foundation for interreligious understanding I have offered might make a small contribution in helping Christians, and perhaps others, engage in this work. I believe that the vision of interreligious cooperation expressed in the URI Charter has the potential to help people of all traditions work together to change human history.

In a modern retelling of Jesus' story of the good Samaritan, perhaps it is our world that lies wounded and dying. Wounded and dying from too much violence and too little active love. Wounded and dying because we the people of the world's religions, spiritual expressions and indigenous traditions have too often through the centuries fashioned our extraordinary treasures into weapons and spilled the blood of our neighbours on this sacred earth. Perhaps now is the time for each of us to take up the challenge of the good Samaritan in Jesus' story, however that challenge is expressed in our tradition. Perhaps now is the time to see in each other person a neighbour we are called to love and serve, to the glory of God, aspiring to the fullness of Buddha-nature and for the well-being of all life. ❑

Thomas à Kempis, the Devotee

THE ISLAMIC PERSPECTIVE

DR M. Z. SIDDIQI

Dr M.Z. Siddiqi was Asutosh Professor of Islamic Culture at the Calcutta University. He was also the head of the department of Arabic at the Lucknow University. We publish excerpts from his article published by the Bulletin of the Ramakrishna Mission Institute of Culture *in July 1960.*

The term 'Islam' literally means to surrender, to pay the due debt and to enter into peace. But the term is generally used to mean the system of religion which its adherents believe to have been revealed by God to His prophet, Mohammed. According to the Koran, however, every true religion is Islam. The religion of Adam, of Abraham, of Noah, and so on are mentioned in the Koran as Islam. Also, the Koran lays down that the God-sent prophets and religious thinkers of the various countries at different periods is Islam. The test of the truth of a religion is its acceptance of the general basic principles of monotheism or the unity of God and of the accountability of man to God for all his actions. Thus not only Judaism and Christianity in their original pristine purity, but also some schools of Hinduism, which believe in monotheism, may be declared as Islam. In fact, Ahmad Sarhindi, who was recognized by the Muslim thinkers of India to be the greatest reformer of the second millennium of the *hijri* era, has explicitly mentioned Krishna as a prophet of God.

Akbar: The Royal Lover of Different Faiths

The Koran accepts the theory of the evolution of religious thought. This is said to have begun with Adam himself and, having passed through various stages of development, it reached its culmination in the religion preached by Mohammed, whose mission was meant for the whole of humanity. The substance of his teaching, as it has been summed up in the Koran, consists in, firstly, correct belief and, secondly, good conduct. The first is the spiritual element and refers to the mind or soul, and the second is the physical element and refers to the body or physique.

The Spiritual Ideals

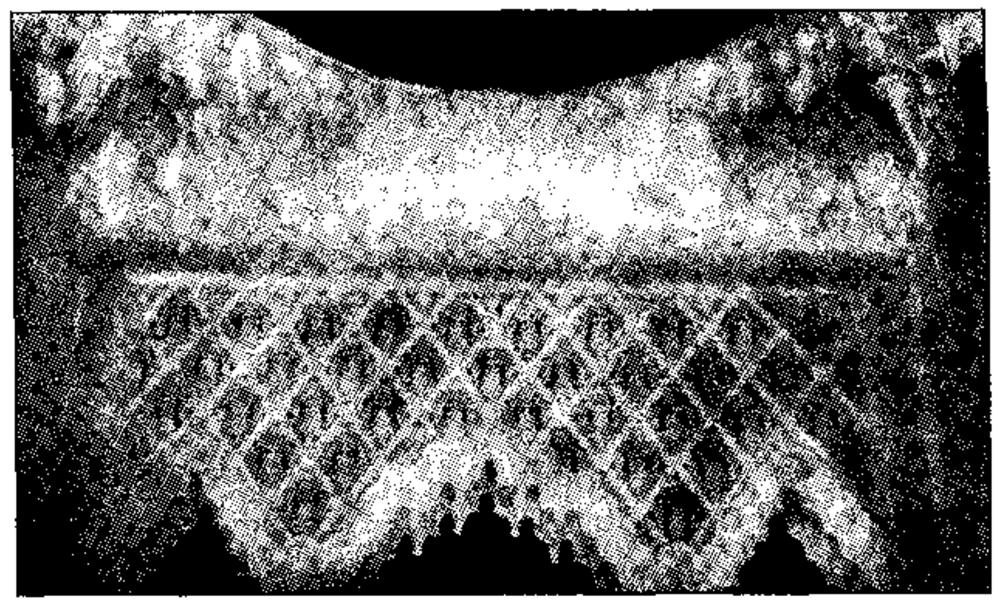
The spiritual element consists in the belief in the unity of God, the belief in the truth of the Prophet Mohammed, and of all the prophets who came before him, and the belief in the accountability of men to God for all their actions in this world.

From the belief in the unity of God follows the acceptance of the unity of the world and also the unity of the whole human race which, according to Islam, is the roof and crown of the whole of creation, the life of every individual member of which is sacred. The belief in the unity of the human race leads to the acceptance of the essential equality of all human beings, irrespective of the apparent and accidental differences of birth, wealth, nationality, and so on. It also leads to the love of all human beings and sympathy for them. The

equality of all men is emphasized again and again in the Koran and by the Prophet of Islam who said in his speech during the last pilgrimage that there is no superiority of the Arabs over the non-Arabs, nor of the non-Arabs over the Arabs. This he demonstrated in various practical ways in his life, and it is also clearly shown in the congregational rituals which are still observed today by Muslims in every part of the world.

The concept of Islam comprehends all the highest attributes which the human mind can think of. He is a living Being, eternal, matchless, omnipotent, omnipresent, and omniscient. He is the creator of the whole universe and its master and sustainer. He is the light of heaven and earth. He is all good, and the source of all goodness. He is just, merciful, and compassionate. To him are due all greatness, glory and praise. There is no God but He. He alone is worthy of being worshipped.

The belief in the unity of mankind and in the sacredness of the life of every individual leads to love and affection among all, irrespective of class, clan and nationality. It helps in the establishment of peace in the world and necessitates the condemnation of cruelty and aggression either by individuals or by clans, races, or nations against one another. The Koran as well as the Prophet condemned it repeatedly and emphatically. 'Whoever then acts aggressively against you,' says the Koran, 'inflict injury on him according to the injury he has inflicted on you' (II.194). According to Islam all individuals as well as nations have the right to live in peace and therefore they have also the right to defend themselves in case of aggression by others. 'And fight in the way of Allah,' says the Koran, 'with those who fight with you, and do not be aggressive; surely Allah does not like the aggressor' (II.190). Indeed, Islam laid great emphasis on the establishment of peace in the world. 'O you who believe, enter into peace one and all' (II.208). A Muslim according the Koran is he who has made peace with God and man. 'Peace is the greeting of one Muslim to another



Marble Art from a Mosque

and peace shall also be the greetings of people in paradise.' God also is the author of peace. Disturbance, chaos, and confusion have been repeatedly and strongly condemned by the Koran. Peace, therefore, according to Islam, should not be allowed to be disturbed, and if disturbed, must be re-established at all costs; even human life which is declared to be sacred may be sacrificed for its sake.

The Prophet of Islam also condemned war for the sake of religion. 'Let there be no compulsion in matters of religion' (II.256). Again the Koran says, 'Call (people) to the way of your Lord with wisdom and kindly exhortation, and have disputation with them in the kindest manner' (XVI.125). The principle of freedom of religion and thought and of converting people to one's own view only by means of kind persuasion and reasoning and not by compulsion has been repeated in the Koran many times. One verse says, 'If thy Lord had pleased, verily all who are in the world could have believed together; wilt thou then compel men to become believers when belief can come only from God?' (X.99). The first treaty which Mohammed concluded with the various groups of people living in Medina at the time of his migration contained an article which declared that each group would be free to follow and practise its own religion, and no one would interfere in it.

Islam in Practice

The physical element in the teaching of Islam consists not only in the performance of the various religious rituals such as prayer, pilgrimage, fasting, and the payment of poor-tax, but also, in obedience to authority, in do-

ing one's duty to one's relatives, neighbours, and other fellow beings, and doing whatever may be beneficial to other men. 'The best of men is he who does good to men,' remarked the Prophet of Islam.

In fact, according to Islam, every act, be it personal, social, political, cultural, or otherwise, falls within the scope of religious deeds. If a man acts with a sincere, good motive he will be rewarded by God; but even such of his actions as may appear to be religious, if done with insincere and improper motives, are not acceptable to God. Thus if a man working in an office or in a factory does his duty because he believes that it is the command of God to do his duty to his employers, he will get his reward for his work from God also. But a man who offers prayers and tells beads the whole day with the idea of attracting people and deceiving them by his apparent piety, will not get any reward for his prayers but will be punished for his evil motives.

'Actions must be judged by their motives,' said the Apostle of God. The Koran says: 'It is not righteousness (piety) that you turn your faces towards the east and the west (in prayer), but righteousness is this, that one should believe in Allah and the last day and the angels and the book and the prophets, and give away wealth out of love for Him to the near of kin and the orphans and the needy and the wayfarer and the beggars and for (the emancipation of) the captives, and keep up prayer and pay the poor-tax; and the performers of their promise when they make a promise, and those who are patient in distress and affliction and in time of conflict—these are they who are true (to themselves), and these are the pious people' (II. 177).

The duties of men have been classified by Muslim doctors into two groups: (a) duty towards God and (b) duty towards one's fellowmen. The latter group in reality forms a part of the former, and the latter, in case of conflict between the two, takes precedence over the former. Thus Islam tried to create harmony between the secular and the divine. Every secular act, as we have seen, becomes divine if it is done with pure motives, while apparently divine acts lose their divine character if they are done with narrow selfish motives. The human mind and character, being an indivisible unit, cannot be divided into different watertight compartments. All their aspects are inter-related and influence one another. Actions are nothing but the reflections and expressions of a person's mind and character. It is, therefore, illogical and arbitrary to divide actions into two watertight compartments of secular and theological.

With the passing of time, however, and with the influence of non-Islamic ideas and ideals on the minds of the adherents of Islam, the broad and basic foundations of their beliefs were washed away and left only the lifeless rituals and soulless ceremonies. The adherents of Islam, therefore, now only talk of those high ideals and perform its rituals without appreciating the spirit behind them. In their prayers and pilgrimage and other rituals there is still shown the equality of all men, but without its proper appreciation. Their sympathies are still wide enough to comprehend all the Muslims of all the parts of the world, but not wide enough to include all the members of the human race, irrespective of caste and colour.

The Islamic elements which should be acceptable universally, to my mind, are (i) the unity of God, (ii) the unity of the world, (iii) the unity of the human race, (iv) the equality of all men, (v) respect for all religions and their prophets, (vi) the condemnation of aggression, be it by an individual or a race or a nation, (vii) the recognition of one's duty and responsibility towards fellow-beings, (viii) the sacredness of human life, and (ix) the universality of all natural laws.

The correct perspective of a religious man should be the spirit of appreciation of the ideas and ideals of those who might differ from him. ❑

A BUDDHIST PERSPECTIVE

SH DHARMAKIRTI

Venerable Sh Dharmakirtiji is a western Buddhist monk, practising spiritual disciplines in the loneliness of Kullu, Himachal Pradesh. Without stressing any one particular faith, Dharmakirtiji points out where problems lie and what the solutions could be.

The 20th century was dominated by western materialist systems—communism, capitalism, socialism—which shaped and polarized the world. But now, as we enter the

Siddhartha's Renunciation:
Ramendranath Chakraborty's painting

21st century, the world is increasingly getting polarized along religious lines. As the power of economic globalization grows, with its roots in scientific materialism, reactionary religious forces of fundamentalism are also growing in equal proportion, claiming to preserve religious traditions, which they feel are threatened by the global culture. Faith-based dogmatic religions that do not have a rational foundation, and whose worldviews are directly contradicted by the scientific-materialist paradigm, feel themselves the most threatened. It is also for the first time in human history that all the great world religions, each backed by millions of followers, armed with the most lethal weapons and technologies, are confronting each other with, at best, mistrust and suspicion, and at worst, with outright hatred and intolerance. Already many religion-based conflicts are raging in the world, and it is clear that some kind of mutual understanding and tolerance between religions will have to develop in the coming years if large-scale wars and conflicts are to be avoided, both at the national and international levels.

A step in this direction would be to establish some kind of pan-religious statutory body, perhaps under the aegis of the UNO at the international level, and under the aegis of parliament at the national level, where religious bodies send elected representatives who promote interreligious dialogue and discussion, settle disputes, and who are responsible for the public conduct of their followers.

Meaningful dialogue between religions must be based on a non-naive understanding of the basic similarities and differences between different religious systems.

The most basic similarity that links all religious systems, and distinguishes them from the scientific-materialist paradigm, is

Siddhartha's Renunciation: Gandhara Sculpture

The Buddha in Meditation: A Sculpture

their unanimous assertion that after the death of an individual something (soul, atman, consciousness, etc) carries on and experiences the 'hereafter' in accordance with one's good or evil deeds while one was alive. This basic religious assertion forms the basis of the moral and ethical injunctions that different religions enjoin on their followers. Within this basic similarity, the four great Indian religions—Hinduism, Buddhism, Jainism and Sikhism—are further united in their assertion that each individual experiences a series of lives, where each successive life is the karmic effect or fruit of one's actions in past lives, and further, that the whole purpose of spiritual endeavour is to seek release from this compulsive cycle of birth-death-rebirth.

Mathura Buddha

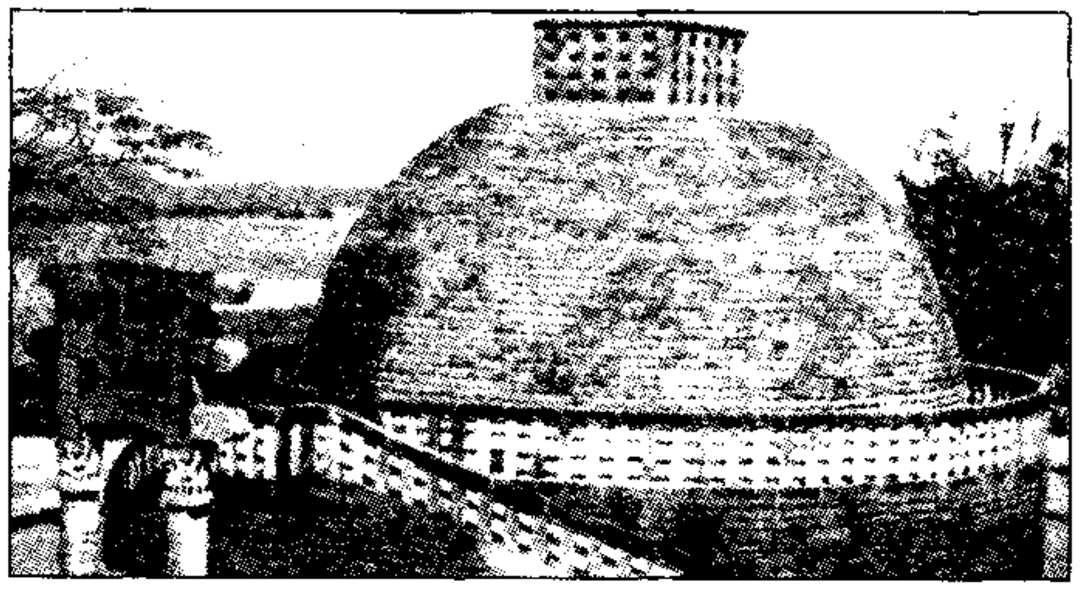
These basic similarities between religions—(1) that the individual is not just the physical body, (2) that some entity survives the death of the physical body, (c) that this entity then experiences a 'hereafter', which is determined by one's actions while alive, and therefore, (4) that some kind of moral/ethical restraint and discrimination between 'good' and 'evil' is necessary while one is alive—could form the bases of some kind of 'common minimum morality' on which all religions could agree, without abandoning their own traditional positions. If this 'common minimum morality' is then jointly enforced, it could be a step in greatly reducing interreligious tensions and prevent religions from getting in each other's way.

But before such a 'common minimum morality' could be formulated effectively, it would be necessary to consider the differences that separate religions, often irreconcilably.

Not only do religions differ in their historical record but they differ in the key areas of (1) philosophical tenets, (2) practice and morality, (3) the explicitly stated aim or purpose of religious endeavour.

Philosophically, religions differ greatly in their assertions concerning the nature of Reality, of the world, of the self or person, of the origin and purpose of all this. On the one hand we have the 'creationists' who propound a 'creator God', and on the other hand we have rational atheistic religious systems which assert that the mind or mentation is the basis of individual and collective karma of beings, and it is this very collective karma that creates and shapes the world we experience, in beginningless and endless cycles of creation and destruction of world systems, over unimaginably vast periods of time. Further, on the one hand we have religious systems that accept the sensory world as absolutely real, and on the other we have systems that negate the absolute existence of any phenomena whatsoever.

Also, in terms of morality and virtuous



The Great Stupa where the Buddha's Relics were kept

The Edict of Ashoka, Declaring Religious Harmony

Hinayana: The Chariot of the 'Lesser Vehicle'

conduct we have religions which permit warfare and killing other beings, and we also have religious systems that absolutely forbid the taking of life under any circumstances, even at the risk of one's own life. In terms of practice, we have purely social religious systems that rely on the observance of rites, festivals, public service and community worship, without any contemplative practice. On the other hand we have systems that are devoted to the cultivation of deep meditative states of mental absorption. Whereas some religions shun rational thought and rely on faith and worship, others consider rational investigation as the principal means of ascertaining the nature of reality in order to free oneself from the shackles of ignorance.

Again, in terms of the explicitly stated purpose of religious endeavour, some systems aim for the attainment of sensory paradise or heaven, some aim for union with God, others aim for release from cyclic existence and the attainment of the immortal state of complete enlightenment.

Thus we can see that though religions differ in their tenets, a careful examination of these tenets will reveal a kind of 'graded sequence' where each tenet-system is appropriate for its particular target-audience. In this way, tolerance for all systems can be developed. If, further, some kind of compromise could be reached through discussion and debate on those particular tenets which are manifestly harmful to the world community and environment, then there is the possibility of peaceful coexistence amongst the world religions.

However, the real problem in the 21st century will remain as to how the scientific-materialist juggernaut, powered by the free-market, can be made into a morally responsible force. ❑

Swami Vivekananda on Rebirth

Why, the memory of one life is like millions of years of confinement, and they want to wake up the memory of many lives! Sufficient unto the day is the evil thereof! ... [To Nivedita, on her father's passing] 'Each soul is a star, and all stars are set in that infinite azure, that erernal sky, the Lord. There is the root, the reality, the real individuality, of each and all. Religion began with the search after some of these stars that had passed beyond our horizon, and ended in finding them all in God, and ourselves in the same. ... I pray that none may be dragged anywhither by the unseen power of his own past actions. I pray that all may be free, that is to say, may know that they are free. And if they are to dream again, let us pray that their dreams be all of peace and bliss.

—from Sister Nivedita, *The Master as I Saw Him*

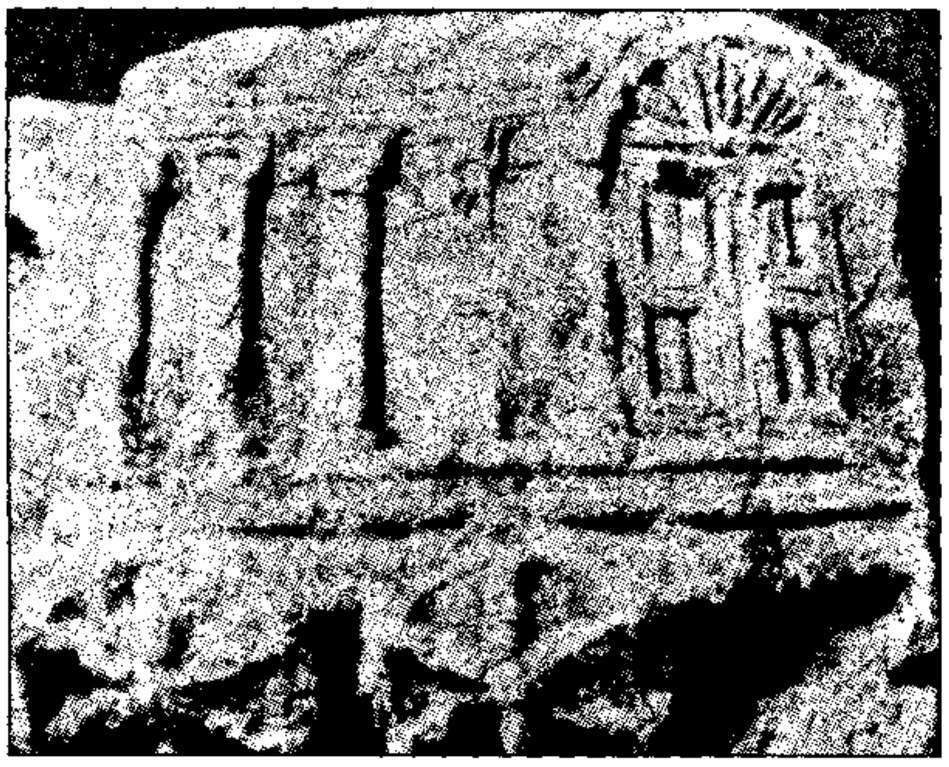
THE JEWISH PERSPECTIVE

RABBI ANSON LAYTNER

We thank Rabbi Anson Laytner, Executive Director, Multifaith Works, Seattle, for his perceptive ideas about interreligious understanding. Comparing God to a multi-faced gem, Rabbi Laytner feels sad at the way different people are arguing endlessly over whose view is true! We hope with the reverend Rabbi that our meanness will soon go and there will be real understanding. Rabbi Laytner is the author if Arguing With God *(Jason Aronson, 1998).*

On Judaism

The first thing one should know about Judaism is that it is not a religion in the accepted sense of the term, but rather a unique combination of a religion-based culture and an ethnicity. It is both a spiritual way of life and a sense of people-hood. These factors, combined with a religious/historic attachment to the Land of Israel, a common language, Hebrew, and a shared sense of history worldwide, create a singular sense of identity among Jews that is surely mythic after a millennium of dispersion around the world (including India), but real nonetheless, to its adherents.



The Ark of the Covenant: Though the Ark is not extant, a sculptured representation was discovered at a synagogue at Capernaum

There has been a great deal of confusion about whether Jews are a religion, a people, or even a race, but most of the confusion stems from the fact that (a) they were long viewed as foreigners/outsiders by the indigenous peoples of Europe, and (b) its 'daughters', Christianity and Islam, truly universal religions, chose to see the Jews primarily as a religion, whose beliefs they had superseded. However, until the French Revolution, Jews considered themselves and, more important in terms of how they were treated, were regarded by their non-Jewish neighbours, as resident aliens, a nation in exile.

In the 19th century, when Jews in Europe first began to receive civil rights in modern nation states, the price of admission into those societies was the renunciation of that corporate sense of people-hood that had sustained the Jews for so many centuries in exile. And it was precisely at the time when Jews began to be truly accepted as equal citizens in European societies that racial anti-Semitism was born: the bizarre notion that Jews were a distinct race unto themselves, the antithesis of white European Christian nations and their national values (regardless of the fact that these were locked in conflict with one another).

This myth of the Jewish race and its transference of race-hatred and racial conflict to the Jewish people reached its apogee with the Nazi-led 'war against the Jews', a war which was waged by one of the most technologically advanced modern states against unarmed and (at least initially) unsuspecting civilians. The Holocaust, in turn, led many Jews to view the

The Prophets: Moses

promises of equal civil rights with some scepticism and to return to a more traditional sense of identity, which included eschewing Europe to 'rerun' to the Land of Israel.

Central to the spiritual path of the Jewish people, ie, that which is commonly called Judaism, is the Covenant, *'Brit'* in Hebrew, between God and the Jewish people. The terms of this Covenant are spelled out in Judaism's sacred books: first in the Tanakh (ie, what Christians call the 'Old Testament'), then in the Talmud (the classic compilation of rabbinic law, lore and ethics), and in later rabbinic works down to our own day. The Covenant not only spells out the nature of the relationship between God, the world, and the people of Israel, but also specifies the moral and ritual practices that Jews traditionally observe as God's commandments. Through righteous living, in accordance with the will of God and in faithfulness to the Covenant, the Jewish people hope to bring closer God's rule of peace and justice on earth. This strong sense of common purpose, combined with an equally strong sense of people-hood and an ages-old attachment to the land of Israel, has enabled the Jews to survive as a distinct (and unique) group despite a worldwide dispersion, small numbers, and great vicissitudes.

Shofar, *the ram's horn of ancient Israel, is blown to call worshippers*

In the modern world, there are a number of different streams of Jewish thought, but the basic division has to do with one's perception and observance of the divine laws. Traditional Jews (Orthodox and Hasidic) believe that God authored both the Written and Oral Laws (the Tanakh and the Talmud) and they observe the commandments as dictated by rabbinic rulings down through the ages. On the other hand, liberal Jews (Reform, Conservative, Reconstructionist, and others) believe in divine inspiration as the source of the sacred books, but also interpret and practise the customs and traditions based on modern scholarship, contemporary relevancy and personal conscience. Despite these differences, the impetus for unity remains strong among all Jews and the lines between the various schools of thought are fluid. Concern for Jewish survival around the world (and the state of Israel in particular) reinforces a shared sense of spiritual purpose, something that, however interpreted, the Jewish people shares not only among its members, but indeed with all of humankind.

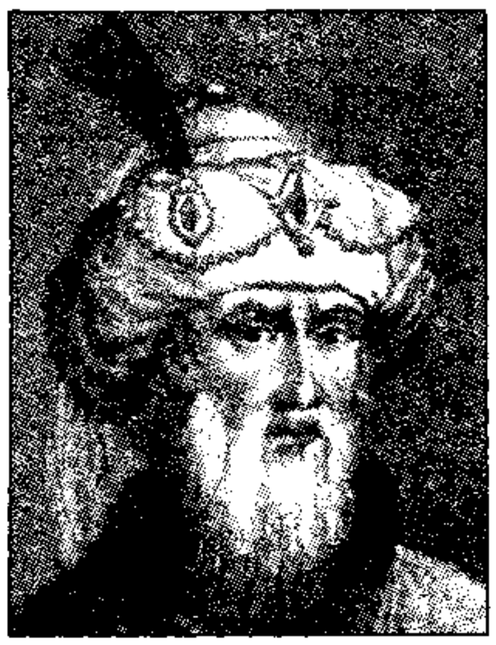
A Jewish Perspective of Interreligious Understanding

Tradtionally, Jews believed that God 'chose' their ancestors in order to make an eternal Covenant with them and to give

The Prophets: Isaiah

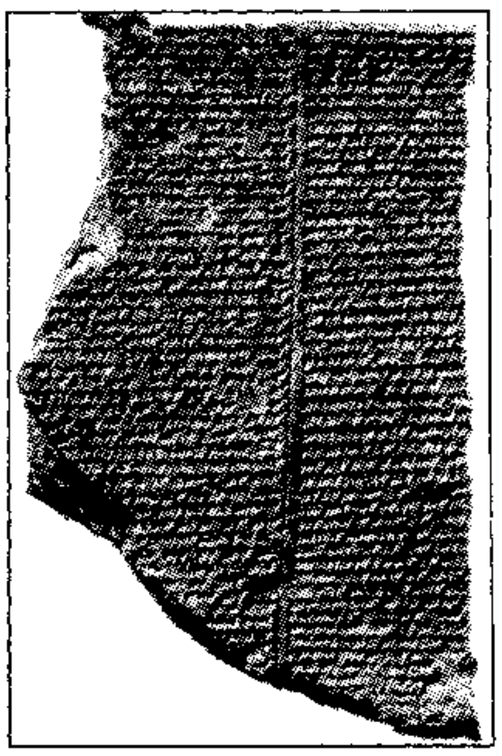
The Prophets: Eziekel

The Prophets: Jeremiah



Flavius Josephus (100 AD): A great Jewish Historian

them the Torah (the first five books of the Tanakh). In our day, it might be more accurate to say that the ancient Jews perceived God as having chosen them because we now know that the ancient Jews were not alone in believing themselves to be God's chosen people. But the notion that God relates to human beings by covenanting with them was and remains central to the Jewish worldview, even to this day. Not only do many Jews still choose to follow the laws of the Covenant in some form or another but, from around the time of the common era (ie, based on the Christian counting), Jewish sages postulated a larger, more inclusive covenant between God and all humanity. This is called the Noahide Covenant after Noah, the patriarch of the Biblical flood story and the second Adam to all who came after him.



The Great Flood Inscription

While the terms of the Jewish Covenant traditionally require Jews to observe 613 commandments as God's 'holy people,' the other nations of the world have just seven to observe under the Noahide Covenant: prohibitions against idolatry, blasphemy, murder, incest and adultery, theft, and eating flesh from a living animal, as well as an injunction to establish legal systems. Closely related to this concept of a universal covenant between God and humanity, is the concept of the 'righteous of the nations of the world' which holds that, regardless of belief, non-Jews who live righteously also will merit a place in the World-to-come. In the Jewish way of thinking, how one chooses to live one's life is more important than what one believes; moral practice supercedes theology. In the end of time, according to traditional Jewish thought, God's justice will be visited on every individual and every nation, and those who have followed God's way—whether the way of Torah for the Jews, or the path of any other religion as long as its adherents follow the Noahide Covenant—will dwell in peace in the divine presence.

Consequently, in terms of interreligious understanding, there has always existed—at least in potential—the possibility for interreligious cooperation based on each religion's teachings concerning the moral life. Each faith has its version of the 'Golden Rule' and, were its adherents to follow these teachings, our world would be much closer to God's kingdom than it ever yet has been. The next step in the process of interreligious understanding after practising what one's faith teaches is to create opportunities to share with people of other religions the spiritual motivation for moral behaviour in each of our faith traditions. Trust is built up by observing that people of other faiths practise similar values regardless of the theological function. We have found that by providing opportunities for interfaith volunteer service in our community, we not only enable people

The Wailing Wall

'Receving'—The Kabbalah

Baal Shem-Tov, the Mystic

of diverse faiths to practise their religion's teachings about helping others in need, but simultaneously create a forum in which to share the motivation with others.

There is one last step of interreligious understanding that may be aspired to, namely, to recognize that all that we think we know about God is just that: only our thinking. What God actually is, is beyond our ability to know. What our faiths teach about the divine is only what our predecessors have gleaned of the matter, not its reality. For Jews, this too has roots in traditional teachings. Even the greatest of the prophets, Moses, was refused a request to 'see God face to face.' Instead, on that occasion and on other occasions as well, the Torah has God say: 'I will be what I will be; I will do what I will do.' In fact, in the Jewish tradition, God's unpronouncable and unutterable personal name, YHWH, is a compound of the present and future tenses of the verb 'to be'. That, we are taught, is what we know about God: Be-ing is. Although it is the traditional aspiration of each Jew to feel God intimately, the key thing, at the risk of being repetitive, is to live according to God's teachings, to follow the terms of the Covenant.

Personally, I imagine God like some multi-faceted gem and I consider each of our faiths as being able to describe at best but a few of its facets. What people have done for too long is argue over whose view is true (or truer). What is needed is for us to understand that we would know more about how humanity views the divine if we shared our perspectives and added them together in order to create a fuller-faceted understanding of the gem. In order to do so, we must be willing to overlook the theologies that for centuries have divided us, in order to make common cause—an alliance of spiritual people committed to doing what is right and good, according to each of their faith traditions, who are interested in learning from one another and working together to improve our world: healing the environment, and bringing peace and justice to their communities. ❑

> It is a most glorious dispensation of the Lord that there are so many religions in the world; and would to God that these would increase every day, until every man had a religion unto himself! Vedanta understands that and therefore preaches the one principle and admits various methods. It has nothing to say against anyone... . It only preaches the principle which is the background of every religion and of which all the prophets and saints and seers are but illustrations and manifestations.
>
> —***Swami Vivekananda***

THE SIKH PERSPECTIVE

SARAN SINGH

Sri Saran Singh, IAS (Retd), is currently the editor of The Sikh Review, *the monthly journal of The Sikh Cultural Centre. Sri Singh is not just a scholarly person but an institution in himself, an authority on the Sikh religion. His writings reveal his depth of understanding and broadness of views. We thank Sri Singh who, in spite of numerous preoccupations, wrote this important article for* Prabuddha Bharata.

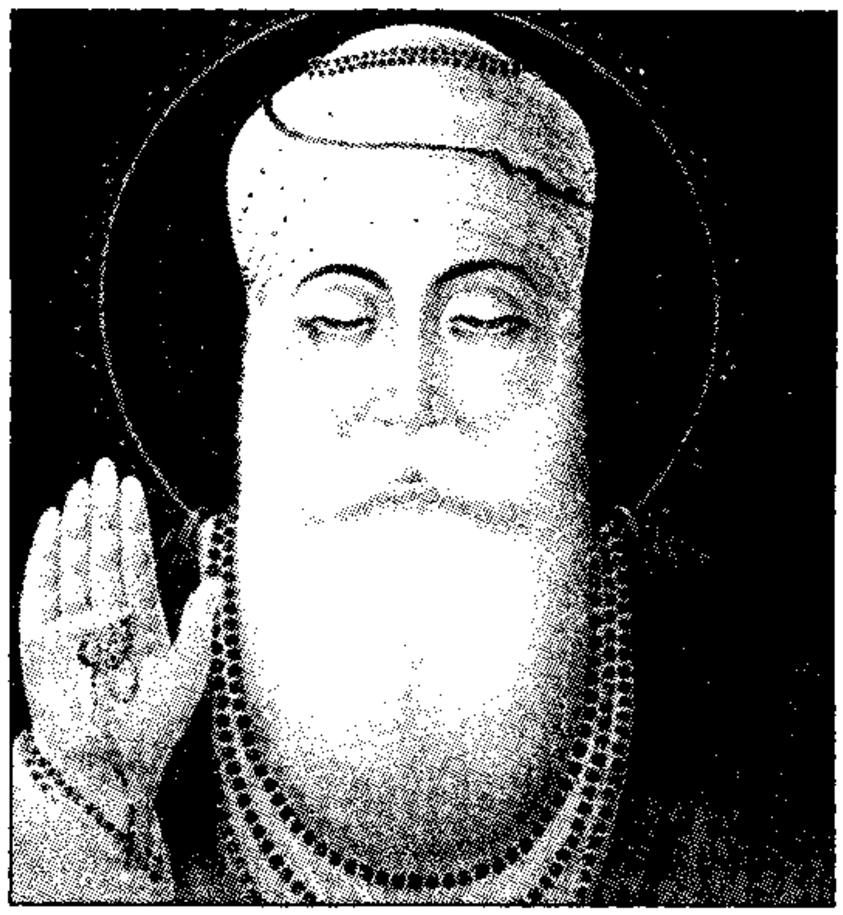
One of the abiding dilemmas of the Indian subcontinent concerns the volatile and uneasy relations amongst various religions that claim to spring from the same God. Guru Nanak befriended Hindus and Muslims alike, with a message of true humanitarianism. In a hymn of great significance, *Sri Guru Granth Sahib* speaks of God as 'revelling in multitudinous diversity.' Indeed, Guru Nanak accepted religious plurality and multiculturalism as the starting points of his divine mission, emphasizing fatherhood of God and brotherhood of man, while exhorting every individual to earn honest wages, to share with the needy and to meditate on God's effulgent name. Only good and caring human beings, whatever their religion, can ensure social and political stability and progress of human civilization.

Devotion

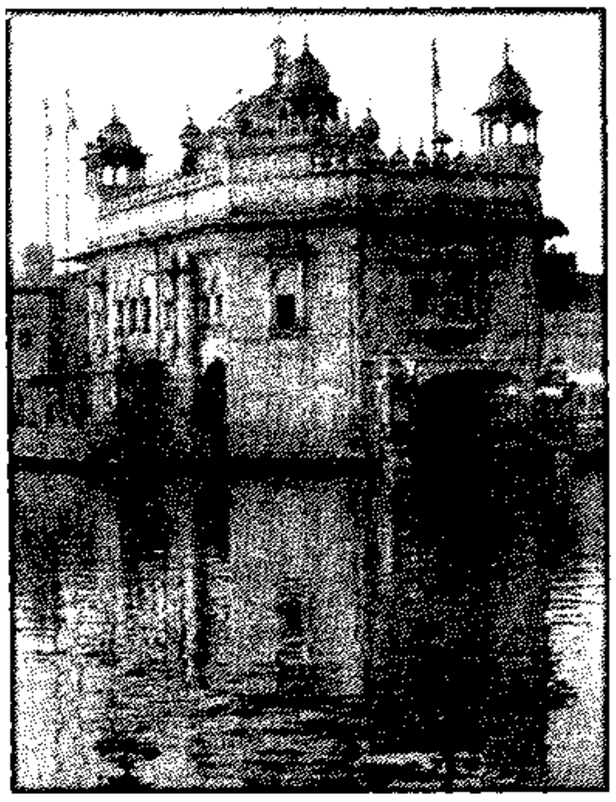
In the *Sri Guru Granth Sahib*, Namdev sings in Bhairav Raga: *'Vād vivād kahūn sio na kījey, Rasnā rām rasāyan pijey,* Pray do not engage in fruitless controversy, but with your tongue enjoy the elixir of God's name. The same holy scripture rings with the Sufi Sheikh Farid's eloquence, in Raga Asa: *'Ratte iṣq khudai raṅg didār ke, Viśariya jin nām te bhui bhār thie,* Let us see God in those who are steeped in His love; others who forget the Lord's name are dead weight on the earth. The abiding wisdom of the saints, and Gurus, beckons us to join hands and celebrate the light of God shining in every heart.' As Guru Gobind Singh says: *'Mānaski jāti sabhe ek hi pehcān bo,* Recognize the human race as one vast family.'

Unity of Purpose

Our task today is not merely to battle against the negative and regressive forces that have eroded mutual understanding. We must face the greater challenge of delineating the common principles and setting the guideposts for a universally relevant religious purpose, for the present and future generations. Such an effort must, by definition, flow from our seminal God-consciousness. It must also address the empirical reality of scientific progress. It is in this context that the spiritual and moral principles bequeathed to us by



Guru Nanak



The Golden Temple: Amritsar

Guru Nanak (1469-1539) acquire relevance as well as immediacy.

Swami Vivekananda had affirmed that 'Religion is not in doctrines. Religion lies in being and becoming, in realization.' Guru Nanak's religion is not just an 'ism'. It is a commitment, a way—a highway, if you like—along which the seeker travels to the goal of Self-realization, of liberation, of union with the wondrous Lord, Waheguru, and becomes a *jīvanmukta*, redeemed in this very life. Anyone who cares to know the *Sri Guru Granth Sahib's* message and lives by its verities each day can validate this himself, becoming accepted in God's kingdom.

Sri Guru Granth Sahib breaks all barriers, rejects all division that discriminates and divides or sets brother against brother, victimizes or abuses our sisters, mothers and daughters. Guru Nanak agonizes for all humanity. His prayer to the Creator is for pure compassion: *'Sabhai jī samhāl apnī mehar kar,* O Lord! By Your grace, protect all creatures.'

The Guru's seminal scripture *Japuji* establishes the vital principle of God's sovereignty of the universe, where obedience of His law (*hukum*) is an essential precondition for Self-realization. The Sikh scripture therefore encourages the pursuit of knowledge. Such knowledge must subserve purely altruistic ends and lead to a better comprehension of our world and of God's will. The *Japuji* concludes with the epilogue: 'The air is the protector, water the sustainer; Mother Earth is the very fabric of life. Day and night are not to be frittered away; the world is an exciting place; you shall be judged by action alone; your destiny is *nām;* your worship is *nām*—you shall realize God in glory!'

Interreligious Dialogue

Guru Nanak's was the first attempt in a thousand years to establish a dialogue between different—often warring—faiths. The founder of Sikhism broke geographical barriers to travel to Baghdad, Mecca and Medina, and carried his message of peace and understanding to the great centres of Islam and established an undying kinship with the people of West Asia. He had earlier trekked to Varanasi, Puri and Sri Lanka as well as across the Himalayas to visit Tibet, Ladakh and Sikkim, and communed with the lamas of the Mahayana school of Buddhism and the yogis of the Gorakh Panthi sect. The latter discourse, enshrined in *Sri Guru Granth Sahib* as *Siddha-Gosṭhi,* is a profoundly philosophic treatise on the verities of God's creation and His central purpose in placing the human race on earth. It urges the pilgrim's progress from the level of a the ego-conscious being (*manmukh*) to the God-conscious being (*gurmukh*). Above all, it appeals to all holy men of wisdom and enlightenment not to abandon the family, the community, or the neighbourhood, and not to run away from responsibility. This troubled world is riven and racked by division and distress, because good people tend to withdraw into cloisters, concerned only to save their own souls.

Social Activism

By introducing the community kitchen system (*laṅgar*), the Guru with one stroke abolished untouchability, encouraging the masses to share a meal irrespective of caste or creed. Even simple acts of fanning the congregation, cleaning shoes and providing water to the thirsty acquired the sanctity of *sevā*, an exercise in humility and a form of meditation.

Sikhism likewise accords prime place to congregational singing as a vehicle for devotion and meditation.

Descartes, the 17th-century philosopher, said, 'I think, therefore I am.' In a profoundly significant verse, the *Sri Guru Granth Sahib* says: 'O mind, you are the spark of the Divine. Once you recognize this truth you shall discover Him within yourself, and by following the Guru's path, rejoice in this spiritual union.' But the mind must develop the capacity to go beyond the chameleonic evidence of the senses. To do so, the Guru advocates the path of reflection:

> How can the Infinite be measured? Without reflection we cannot comprehend it. Such reasoned reflection is possible only with the help of the holy word, because God manifests himself through His attributes that can be perceived, even as He is ineffable!

The word 'Sikh' literally means a disciple. A disciple must observe discipline. Sikhism, thus connotes a viable, practical, moral code of conduct requiring its adherents to adore and remember God, earn an honest living and share it with those in need. The miracle wrought by the ten Gurus consists in how they achieved celestial heights of spiritual purity in a strife-torn world while inspiring their followers to make every kind of sacrifice for a life of righteousness.

A Congregational Faith

Sikhism is not merely an exercise in personal piety nor a test of physical endurance, demanding as it is in the observance of the moral code. An important component—perhaps the sine qua non—of the Sikh way of life is social justice and end of exploitation, achieved essentially through peaceful and non-violent resistance to oppression and tyranny. In any discussion of morality and ethics, different perspectives have been developed about how a person may live a good life. The Sikh response is: by discipline, ie, by living the moral life based on love of God and His creation. In fact Guru Nanak calls life 'a game of love,' in which one must be willing to put one's very life at stake. All shibboleths, rituals, cant, hypocrisy and formalism are roundly condemned by Guru Nanak.

Guru Gobind Singh

A Brave New Generation

In an age when science is engaged in cloning humans, when a youthful generation is desperate to withdraw into its own world of sensual gratification, it is worthwhile to involve the youth in ethical practices which emphasize the holiness of life—that the human body is the temple of God. Every human being has the right and duty to strive for Self-realization—not sensual gratification. It is towards achieving this all-important goal that the Gurus prescribe the Khalsa code of conduct—a code that demands dedication, not penance, of the body, abstinence from deleterious drugs and intoxicants, and a regimen of early rising, virtuous living and moderation in the satisfaction of human needs.

Alienation

But the modern age is, in many respects, the age of alienation and anxiety. On the one hand, the intelligentsia tend to seek answers to their innermost questions through science and technology; on the other, the unlettered masses cling to superstition and look for supernatural intervention to end their woes. Arguably, technology does not change the basic human instincts and aspirations. It only makes people more impatient with the status quo. It is here that the *Sri Guru Granth Sahib* becomes relevant. The Sikh scripture is not in conflict with scientific thought. While Sikhism does not inhibit the use of rational investigation, it asserts the primacy of harmonious living which is the fount of all those values which

enhance and give purposive direction to civilization on this earth. Without such direction, the ideal of universal peace, justice, brotherhood, freedom and happiness shall forever elude mankind.

Environment and Survival

In the context of today's environmental concerns, it is interesting to note that references to cosmos and to harmony in nature in Sikh scripture are surprisingly modern in terms of perspectives of present-day anxieties. The *Sri Guru Granth Sahib* declares: There are vast and immense spaces of mind and spirit which remain a mystery. Not all human experience can be evaluated in terms of rational definitions, as is evident from the concepts of good and evil, love and hate, happiness and suffering. *Gurubāni* celebrates nature, woods and forests, the life in the wild, birds, flowers and fruits in all their glory, gushing springs, rushing rivers and vast oceans—with resources yet unknown. The brave new generation has a commitment with the Creator: to remain true and courageous in the cause of collective humanity.

Finally, human dignity is key to civilization. According to Sikh scripture, practice of slavery, bonded labour, deprivation of the poor, and exploitation of women are acts of sin that must incur the severest censure. As seen from the historical and scriptural insights, Sikhism stands for a humane society, or *halemi rāj* of the scripture, where there is justice, equality and opportunity—for the pursuit of happiness for everyone. The Sikh daily prayer invariably concludes with *sarbat-dā-bhalā*, invoking God's blessings and goodwill for the whole of the community. Let the lamp of the holy Word illumine the universe.

Let mutual understanding be God's instrument to save humanity. ❑

The Land Called Punjab

This is the land where, like its mighty rivers, spiritual aspirations have arisen and joined their strength, till they travelled over the length and breadth of the world and declared themselves with a voice of thunder. This is the land which had first to bear the brunt of all inroads and invasions into India; this heroic land had first to bare its bosom to every onslaught of the outer barbarians into Aryavarta. This is the land which, after all its sufferings, has not yet entirely lost its glory and its strength. Here it was that in later times the gentle Nanak preached his marvellous love for the world. Here it was that his broad heart was opened and his arms outstretched to embrace the whole world, not only of Hindus, but of Mohammedans too. Here it was that one of the last and one of the most glorious heroes of our race, Guru Govind Singh, after shedding his blood and that of his dearest and nearest for the cause of religion, even when deserted by those for whom this blood was shed, retired into the South to die like a wounded lion struck to the heart, without a word against his country, without a single word of murmur. ... 'When Guru Govind gives the Name, i.e. initiation, a single man becomes strong enough to triumph over a lakh and a quarter of his foes.' ... Guru Govind made it understood everywhere that the men of his age, be they Hindus or Mussulmans, were living under a regime of profound injustice and oppression.

—Swami Vivekananda

THE ZOROASTRIAN PERSPECTIVE

BEHRAM DEBOO

Mr Behram Deboo is the founding member of the Zoroastrian Society of Washington State, serving the society both as President and Secretary. He is now serving as an assistant priest (Mobedyar) *of the Zoroastrian community in Washington, USA. Mr Deboo has spoken at the North American Zoroastrian Congress and the 6th World Zoroastrian Congress. He studied the* Avesta *under Sir C.J. Madressa. He is a retired clinical microbiologist.*

Zarathushtra was the founder of the most ancient monotheistic religion, rightly called *'Deana Vanghuhi Mazdayasna*—the Mazda-worshipping religion of good conscience.' However, the western scholars called it Zoroastrianism.

There was a time when the Iranians and the Indians, also known as Indo-Europeans, formed a single people bearing the name 'Arya', later, Aryans. Both had several common traditions, deities such as Asuras and Daevas and closely related languages. The Asuras were gods in relation to men as protectors of morality, ethics, inspiration, reverence and fear. Daevas were gods representing powers of nature such as sky, light, storm and so on. Varuna, the great Asura, was the ethical god par excellence.

Iranians and Indians separated from each other with the monotheistic teaching of Zarathushtra that spread among the Iranians. This caused the reverse meaning of Ahuras or Asuras and Daevas, in both the groups. Iranians demoted Daevas as evil spirits or men who attacked, killed and robbed people living in peaceful settlements. Indians gradually disfavoured Asuras as dreaded deities or evil spirits.

Zarathushtra

Although the *Avesta* is considered as the Zoroastrian Bible, many scholars consider *Gathas* (songs) the true work of the founder, written in a dialect slightly different from the Avestan dialect. Since there is a great debate going on regarding his exact birthplace and date, we will forego these topics in this paper to keep the proper perspective.

Zarathushtra had a revelation at the age of 30. He taught that there is one God whom he addressed Ahura Mazda or Mazda Ahura, meaning the Wise Lord or Wise Creator. He assigned to him six attributes that later became *Amesha Spentas*—Holy Progressive Immortals. Eventually, they with Ahura Mazda became the Divine Heptad spoken of as One in thoughts, One in words, and One in deeds. He taught mankind to strive for mental and spiritual state of bliss here and beyond.

Zarathushtra viewed God as transcendent and immanent, absolute and relative. He described God in an abstract form that saw no need to worship idols or images. Because of the Persian influence, Yahweh, the sky god, is now slowly emerging as the God of the Jews along with the abolish-

ment of worshipping idols.

During Zarathushtra's time, people were used to making offerings to personal gods who were given forms and humanized. They needed some sort of an intermediary through which they could make offerings and say prayers. Zarathushtra accepted fire (*athra, atar, atesh, adar,* etc) as the symbol of divinity. Like Hindus, Zoroastrians in the younger *Avesta* elevated fire to a level of *Yazata* (a worshipful being) and prayed to it as the son of Ahura Mazda in one of the prayers. It appears that lighting a fire in some form is the symbol of most religions between all that is mundane and divine. Fire in Zoroastrianism is the visible symbol of righteousness. It stands for purity. Mental and spiritual purity can be achieved by igniting within the spiritual fire of Ahura Mazda who is eternal light and His very nature is light. He lives in the everlasting lights of the highest Heaven.

Zoroastrianism believes in the principle of goodness that will ultimately prevail over evil. The ***first*** attribute he calls *Vohu Manah*—good divine mind. Creation is a mental aspect when Ahura Mazda evolved in His mind the thought of creating the Cosmos. This is akin to Plato's ideas of Good and Aristotle's view of the Prime Mover. Since the universal mind is floating all over the universe and connected with the individual mind, Zarathushtra establishes the ethics of good thinking in his followers. *Gathas* employ *khratu* or divine wisdom. It was further classified into *asna*, innate wisdom, and *gaoshosrutd*, acquired wisdom. Another word Zarathushtra uses is *chisti*—spiritual knowledge. According to Dr Paul de Breuil, long before Plato and Aristotle, Zarathushtra had united God with wisdom. For Aristotle, any philosophical step seeking the 'highest principles' included a part of divine wisdom known as *theosophia*.

In later theology, *Vohu Manah* becomes materialized and becomes the guardian angel of the animal kingdom. In the spiritual realm, heaven is *Vohu Manah*'s domain.

Asha Vahishta is the ***second*** attribute. It is a poetic form of the word *arta, areta* or the Sanskrit *ṛta*. Words derived from this stem have been freely used in western Asia and surrounding countries about 4000 years ago or more. A Mittani king Dushratta mentions the names of his brothers as Artashmara and Artatama in a letter to his brother-in-law Amenhetep III of Egypt. This letter was written in the cuneiform language on a clay tablet and was found in middle Egypt. From this word we can see that Aryans have been around that area for a long time. Fire is the symbol of *Asha Vahishta*, the best righteousness.

Without *Asha*, there would not have been cosmo-genesis or biogenesis. *Asha* is the order of things. Dr Radhakrishnan defines *ṛta* as 'the universal essence of things; it is the truth of things. Everything that is ordered in the universe has *ṛta* for its principle.' *Asha* is thus right order that Zarathushtra extends to human ethics. It is the law of righteousness. It is the best truth. It is the best expression of purity. It is the pivot around which the ethics of Zarathushtra revolves. For righteousness is the will of Ahura Mazda. One should commit oneself to right thinking, right speaking and right doing. The path of *Asha* is the path of knowledge, equal to the Jnana Marga of India.

The idea that free will is holy is disputed by theologians. In the *Gathas*, Zarathushtra teaches that man is free to choose either the path of righteousness or of untruthfulness with accountability in the end. Men are morally responsible for their actions. Early Christian sects had such views, called pastoral Christian ethics, developed out of Judaism and Zoroastrianism.

Vohu Khashathra is the ***third*** attribute. It has the same root origin as *kshatriya* of San-

skrit. It means God's sovereignty, rule and kingdom. Long before Plato, Zarathushtra believed that the ruler of a country should be moral, ethical and righteous. We find similar ideas in the *Ramayana*. The highest aspiration of each man and woman, according to Zarathushtra, is to be worthy of entering into the divine Kingdom and living in it.

The ***fourth*** attribute is *Aramati or Armaiti*. *Aramati* is addressed as the daughter of Ahura Mazda. The symbol is the Mother Earth. She represents love, devotion, peace and harmony. It is also right-mindedness. It is the principle of furthering an ideal society on this earth. She reminds us of the 'World Mother' (*Jagat-Janani*) of the Hindus.

The ***fifth*** is *Haurvartat*, (*sarvatvam* in Sanskrit). This means spiritual completeness or perfection. The kingdom of God can only be established with the spiritual perfection of the world. *Haurvartat* is the reward that comes to a life dedicated to *armaiti*.

The ***sixth*** one is *Ameretat* (*amṛtatva* in Sanskrit) which means the immortality that one attains after reaching the highest spiritual perfection. We on this earth should try to emulate these attributes of God and that would eventually lead us to be God-like.

Once upon a time, the Persian empire was a huge one. The founder of this empire was Cyrus the Great, who delivered the Jews from their Babylonian captivity and allowed 42,360 of them to return to their homeland under the guidance of Davidic Zerubabel and Joshua. He ordered his soldiers not to commit any violence on the conquered subjects, their properties and temples. Historically, this is considered the First Charter of Human Rights as declared by the Human Rights Commission of the UNO. The cylinder in which this order was passed is preserved in the British Museum in London. For his benevolent act, Cyrus is praised 'the anointed of the Lord' in the Bible.

The most misunderstood Zoroastrian idea is dualism. Zarathushtra in the *Gathas* says that there were two spirits from the very beginning; when they came together they created life and non-life. *Spenta Mainyush*, (sounds like the Sanskrit *mānyuḥ*), the holy, progressive and creative spirit or mind chose the path of *Asha* or goodness, while *Angre Mainyush* chose the destructive, retarding mentality. Both ideals are there before us: freedom of choice between these two *Mainyushes* is an individual's responsibility. Zarathushtra urges us to listen to the highest truth with an enlightened mind before choosing and acting upon the ways of good and bad.

As time passed, the Zoroastrian theologians identified Ahura Mazda with the holy Spirit and Ahriman with the evil spirit, co-equal but not co-eternal. One is good and the other bad—not by nature but by choice. For Zarathushtra, in Ahura Mazda lies all goodness.

Zarathushtra is described in the *Gathas* as *Ratu* (spiritual master, *kratu* in Sanskrit?), spiritual judge, *Saoshyant* (human benefactor) and *Manthran*. He brought new *manthras* (*mantras* in Sanskrit) to uplift mankind to a new vision with human dignity. *Gathas* are divinely inspired *manthras*.

Zoroastrianism is thus a very dynamic religion. However, the pre-Zarathushtrian gods and goddesses re-entered with their priests, bringing their customs and rituals into the fold. During the Sassanian times, it became a very ritualistic and state religion. After Arab invasion, it barely survived due to force, head taxes and attrition. To save the religion, Parsis came to India. Today, a population of, maybe 160,000 or 180,000, remain in the whole world.

Zoroastrianism, no doubt, is a universal religion. In India, Parsis lived as one of many castes, preventing them to cross the line or preventing anyone to enter. The historical fact is, Zoroastrianism was the first missionary re-

ligion, emphasizing the freedom to choose with a free will rather than by coercion. Many tribes in all corners of the Persian empire accepted this religion. A high priest of Iran has stated that even Turkish and black African servants in Iran were brought into this faith, according to the ancient Persian laws *Matikan-e-Hazar Datestan*. According to the Persian *Rivayet*, Hindu servants were also initiated into the faith. Though Christian today, Armenia was once a Zoroastrian country.

There has been a serious problem of interfaith marriage among the community. Children of Parsi fathers with non-Zoroastrian spouses are accepted. But that also is falling into disfavour. Women once married outside are almost ostracized and there is a stubborn resistance from the conservative group to allow their children into the faith. Several women did have the courage to say that though they married outside, they have remained Zoroastrians and their children should be allowed into the faith. Some children are, indeed, admitted into the faith in North America and India against all odds. Some years ago, when an Anglo-Saxon in America became Zoroastrian, there was great uproar in the community. However, one group in America has started accepting those who have studied Zoroastrianism and sincerely believe in the teachings of Zarathushtra into the faith. They are facing stiff opposition from the ultra-conservative Parsis. Against this background, it is praiseworthy that the Vedanta centres have spread the teachings of Swami Vivekananda and his guru, Ramakrishna, and initiated worthy people into monasticism regardless of the skin colour.

Priesthood in Zoroastrianism still remains hereditary. However, due to shortage and unavailability of priests in North America, the Council of Zoroastrian Priests has started a programme here to ordain qualified candidates from the non-priestly class as assistant priests (*Mobedyars*). It is certainly a sign of progress in thinking and attitude. Parsis, like Muslims, have asked for exemption from the adoption law. Our population is dwindling at an alarming rate. For survival and growth, we must take serious steps to go back to the pristine teachings of Zarathushtra and adapt to the times without sacrificing the basic tenets. It was the goal of Zarathushtra to bring about the final renovation and resurrection of all living beings. ❑

Harmony with Nature?

We hear a great deal about living in harmony with nature, of being in tune with nature. This is a mistake. This table, this pitcher, the minerals, a tree, are all in harmony with nature. Perfect harmony is there, no discord. To be in harmony with nature means stagnation, death. How did man build this house? By being in harmony with nature? No. By fighting against nature. It is the constant struggle against nature that constitutes human progress, not conformity with it.

What relation then does man bear to nature? From the lowest form of life to man, the soul is manifesting itself through nature. The highest manifestation of the soul is involved in the lowest form of manifest life and is working itself outward through the process called evolution. ... The whole process of evolution is the soul's struggle to manifest itself. It is a constant struggle against nature.

—Swami Vivekananda

Religion for the Future

Scope, Prospects and Proposals

We have till now participated in a beautiful discussion from eminent scholars on interreligious understanding. Here are the common man's ideas about the future of religion.

Conversion

There was a cartoon in some periodical a few months ago. A few fierce-looking armed men are standing on a hilltop. They have caught hold of an emaciated and terror-stricken villager, and are about to throw him down a deep gorge. The leader of the terrorists is saying: 'Decide this moment. Will you believe in the all-merciful, compassionate, most loving God, or die?' The other soldiers of God are grinning, caressing their guns, and are enjoying the conversion of a heathen into their merciful God's peaceful faith.

We have fought enough over the superiority of our respective religions. We should know at least now, in this 'global village' age, that numbers aren't everything. A hundred enlightened men and women can revolutionize the world, not a huge army of idiots, as Swami Vivekananda felt. Religious leaders, mad after making the millions believe in their most superior God and most compassionate Father, must have realized already that if numbers were everything, theirs would have been the greatest and the most successful religion on earth. Unfortunately it is not so. Though they are converting the ignorant, unlettered, eager-for-bread masses into 'the true faith' by showing a few loaves of bread, they know problems remain. Convert from one end, and the other end is asking questions.

Even when swordsmen were the rulers for centuries, had complete control over everything, and tried their utmost to make everyone believe in their faith which they claimed was full of peace and glory, and used brutality to an unbelievable extent, they could not convert the whole population to believing in their own peaceful and merciful God. What to speak of now, in this age? So let the so-called religious people of the world allow the masses to breathe and live in peace, and not create unnecessary tensions in their minds.

Thus conversion and number game are not the ways religions can grow. Swami Vivekananda said:

> Religion is realisation; not talk, nor doctrine, nor theories, however beautiful they may be. It is being and becoming, not hearing or acknowledging; it is the whole soul becoming changed into what it believes. That is religion (*The Complete Works of Swami Vivekananda,* Vol. 2, p.396).

Should we not preach then? Swamiji says:

> The greatest name man ever gave to God is Truth. Truth is the fruit of realisation; therefore seek it within the soul. ... The moment you think creed and form and ceremony the 'be-all' and 'end-all', then you are in bondage. Take part in them to help others, but take care they do not become a bondage. Religion is one, but its application must be various. Let each one, therefore, give his message; but find not the defects in other religions. You must come out from all form if you would see the Light. Drink deep of the nectar of the knowledge of God (*Complete Works,* Vol. 6, p. 82).

Only One Religion

Secondly, religious leaders have perhaps realized that the boyish notion that their religion alone will stay on earth and the rest will be wiped out is the greatest mistake they have ever made. To say that my religion is the best and it is the only one that will lead you to salvation is false pride. Religion is not man-made, however great that man might have been. Religion is made by God and it is His will

that there should be many religions to suit different tastes of peoples. So try as they may, the so-called powerful religious leaders can't erase other faiths from the face of the globe and establish their own. Having faith in one's religion isn't being decried here. But wishing others to die is called immaturity.

What is the way then? Harmony is the way of the future:

> ...holiness, purity and charity are not the exclusive possessions of any church in the world, and...every system has produced men and women of the most exalted character. In the face of this evidence, if anybody dreams of the exclusive survival of his own religion and the destruction of the others, I pity him from the bottom of my heart, and point out to him that upon the banner of every religion will soon be written, in spite of resistance: 'Help and not Fight,' 'Assimilation and not Destruction,' 'Harmony and Peace and not Dissension' (*Complete Works*, Vol. 1, p. 24).

The One God

This leads us to the question of the one God: most compassionate, most merciful, and most benevolent. Children quarrel: 'My toy is the biggest.' Similarly, we too have been quarrelling: 'My God is the greatest. He is the only God.' God must be enjoying the fun!

In the face of the need for religious harmony, how to reconcile the need for the only one God? It can be easily done. All these centuries, we have been fighting over the superiority of the one God in heaven. ***Let us now turn our attention to the only God on earth: man.*** We have disturbed the peace on earth enough in order to show the superiority of our most peaceful God in heaven. We have shed enough blood, killed enough in order to prove the greatness of our loving and merciful God in heaven. Let us now turn our attention to the only God on earth. A beautiful allegory is seen in Ramakrishna's life. Ramakrishna once went to embrace the image of God in ecstasy. He fell down and broke his arm. God told him: 'Turn your attention to the man-God now.'

Swami Vivekananda said:

> Let all other vain gods disappear for the time from our minds. This is the only god that is awake, our own race—'everywhere his hands, everywhere his feet, everywhere his ears, he covers everything.' All other gods are sleeping. What vain gods shall we go after and yet cannot worship the god that we see all round us, the Virat? When we have worshipped this, we shall be able to worship all the other gods. Before we can crawl half a mile, we want to cross the ocean like Hanuman! It cannot be. Everyone going to be a Yogi, everyone going to meditate! It cannot be. The whole day mixing with the world with Karma Kanda, and in the evening sitting down and blowing through your nose! Is it so easy? Should Rishis come flying through the air, because you have blown three times through the nose? Is it a joke? It is all nonsense. What is needed is Chittashuddhi, purification of the heart. And how does that come? The first of all worship is the worship of the Virat—of those all around us. Worship It. Worship is the exact equivalent of the Sanskrit word, and no other English word will do. These are all our gods—men and animals ... These we have to worship, instead of being jealous of each other and fighting each other. It is the most terrible Karma for which we are suffering, and yet it does not open our eyes! (*Complete Works*, Vol. 3 pp. 300-1).

Thus, the future religion is the religion of the human being. He is the greatest God. The greatest worship is to bring peace and solace unto another heart. No quarrel, no fight, no hatred, no superiority complex, no killing one another over the most peaceful and merciful God. God has come down now. Let us worship him. No religion debarrs us from doing this worship.

Therefore, 'Forward! We want infinite energy, infinite zeal, infinite courage, and infinite patience, then only will great things be achieved' (*Complete Works*, Vol. 6, p. 384). ❑